EPSON

EPSON STYLUS® COLOR

440

EPSON Stylus COLOR 440 Manual

FCC Compliance Statement
For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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Introduction

Your EPSON Stylus® COLOR 440 printer is the perfect printer for small office or home use. You can print anything from reports and resumes to photos and greeting cards. With resolutions up to 720 by 720 and EPSON's Micro Piezo™ technology, you get amazingly realistic photographic images, vivid color graphics, and razor-sharp black text.

EPSON's specially formulated ink cartridges and wide variety of ink jet papers offer the greatest flexibility for getting the results you want.

This chapter gives you general information about your printer in these sections:

◗ System Requirements

◗ How To Use Your Manual

◗ ENERGY STAR Compliance

◗ Year 2000 Ready

◗ Important Safety Instructions

◗ Identifying Printer Parts

System Requirements

To use your printer and its software with a PC, your system should have:

◗ Windows® 3.1x, Windows 95, Windows 98, or Windows NT® 4.0

◗ An IBM® compatible PC with at least a 486/25 MHz processor for Windows 95 and Windows NT 4.0; 486/66 MHz processor for Windows 98; and 386/25 MHz processor for Windows 3.1. A Pentium® processor or its equivalent is recommended.

◗ 16MB RAM (32MB recommended)

◗ At least 50MB of free hard disk space for storing images (100MB recommended)

◗ VGA or better display adapter and monitor

◗ Double-speed CD-ROM drive (quad-speed or faster recommended)

◗ A high-speed, bidirectional, IEEE-1284 compliant parallel cable (6 to 10 feet long) to connect your computer to the printer. The cable must have a D-SUB, 25-pin, male connector for your computer and a 36-pin, Centronics® compatible connector for the printer.

How To Use Your Manual

This manual contains the following information:

Basic Printing covers the basics of printing with Windows.

Advanced Printing tells you how to print special projects with custom settings for print quality, color management, and distinctive layouts.

Printing on Special Media gives guidelines for selecting and using the right paper or other media for your print job and instructions for loading it in your printer.

Managing Print Jobs explains how to manage print jobs, check printer status, and handle network printing.

Maintenance and Transportation gives instructions for replacing ink cartridges, cleaning and aligning the print heads, and cleaning and transporting the printer.

Troubleshooting provides solutions for any problems you may have with your printer software.

Specifications provides the technical details of your printer, ink cartridges, and EPSON media.

A Glossary and an Index are included at the end of the manual.

Warnings, Cautions, Notes, and Tips

You'll find this information throughout your manual:

Warnings must be followed carefully to avoid bodily injury.

Cautions must be observed to avoid damage to your equipment.

Notes contain important information about your printer.

Tips contain additional hints for great printing.

ENERGY STAR Compliance

As an ENERGY STAR Partner, EPSON has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

The EPA ENERGY STAR Office Equipment program is a voluntary partnership with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, and copiers in an effort to reduce air pollution caused by power generation.

Year 2000 Ready

Your EPSON printer is *Year 2000 Ready*. However, be sure the other parts of your computer system are also ready for the year 2000.

Important Safety Instructions

Before using your printer, read the following safety instructions to make sure you use the printer safely and effectively.

◗ Always use the ⏻ power button to turn the printer on or off. Never use an external switch—such as a power strip—to turn off the printer.

◗ Turn off and unplug the printer before cleaning. Clean with a damp cloth only. Do not spill liquid on the printer.

◗ Do not place the printer on an unstable surface or near a radiator or heating vent.

◗ Do not block or cover the openings in the printer's cabinet or insert objects through the slots.

◗ Use only the type of power source indicated on the printer's label.

◗ Connect all equipment to properly grounded power outlets. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.

- ◗ Place the printer near a wall outlet where the plug can be easily unplugged.

  Placez l'imprimante près d'une prise de contacte où la fiche peut être débranchée facilement.

- ◗ Do not let the power cord become damaged or frayed.

- ◗ If you use an extension cord with the printer, make sure the total ampere rating of the devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total of all devices plugged into the wall outlet does not exceed 15 amperes.

- ◗ Except as specifically explained in this *Manual*, do not attempt to service the printer yourself.

- ◗ Unplug the printer and refer servicing to qualified service personnel under the following conditions:

  If the power cord or plug is damaged; if liquid has entered the printer; if the printer has been dropped or the cabinet damaged; if the printer does not operate normally or exhibits a distinct change in performance. Adjust only those controls that are covered by the operating instructions.

- ◗ Do not put your hand inside the printer or touch the cartridge during printing.

- ◗ Under normal circumstances, ink will not come out of the cartridge. If it does get on your skin, wash it off with soap and water. If it gets in your eyes, flush them immediately with water.

- Keep ink cartridges out of the reach of children.
- Do not dismantle the ink cartridges or try to refill them. This could result in damage to the print head.
- Once you install an ink cartridge, do not open the clamp or remove the cartridge except to replace it with a new one. The cartridge may become unusable otherwise.
- Install the ink cartridge immediately after you remove it from its foil package. Leaving the cartridge unpacked for a long time before use may result in reduced print quality.
- Do not use an ink cartridge beyond the date printed on the cartridge carton. For best results, use up the ink cartridges within six months of installing them.
- Do not shake an ink cartridge; this can cause leakage.
- Always turn the printer off using the ⏻ power button. When this button is pressed, the ⏻ power light flashes briefly then goes out. Do not unplug the printer or turn off the power to the outlet until the ⏻ power light is off.
- Before transporting the printer, make sure the print head is capped in the far right position and the ink cartridges are in place.

Identifying Printer Parts

If you need help identifying the parts of the printer, refer to the following illustrations:

paper support

sheet feeder

right edge guide

printer cover

left edge guide

output tray

output tray extensions

thickness lever

ink cartridge clamp

control panel
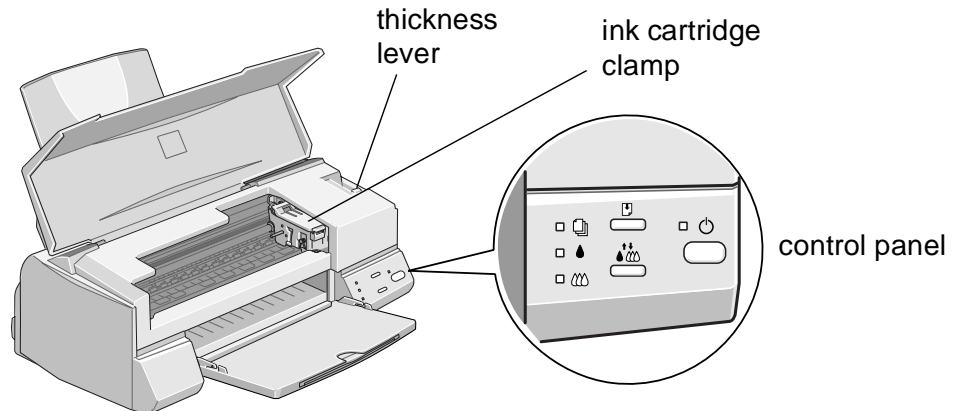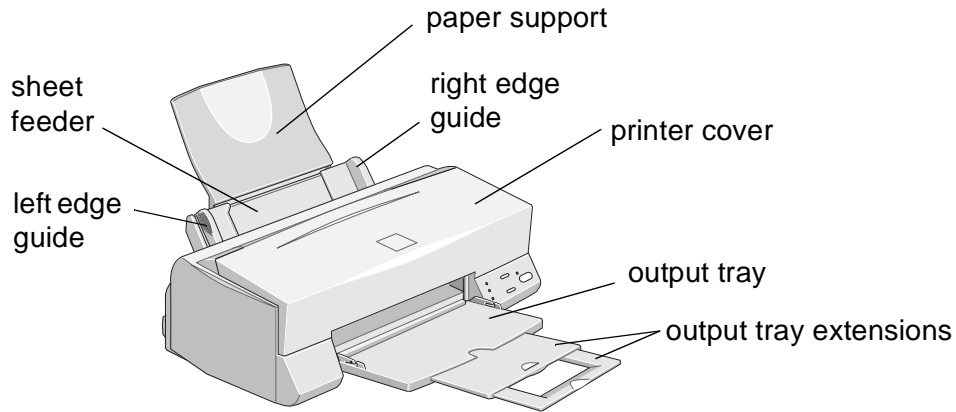
Basic Printing

It's easy to print with your new EPSON Stylus COLOR 440. First set up and install the printer software, following the instructions in the *Printer Basics* guide. Then read this chapter to learn about:

◗   [Printing from Windows Applications](#)

◗   [Checking Printer Status](#)

Printing from Windows Applications

To print from your Windows application, click the print icon or choose **Print** from the File menu. You can then choose which pages to print, the number of copies, and other options. The settings that describe your print job—whether you want to use color or black ink, for example—are part of your printer driver software.

The following sections tell you how to set printer options from Windows applications, how to change the default printer settings, and how to check your printer's status.

Setting Printer Options from Windows Applications

This section describes the settings you'll need to make for all your everyday printouts. See Using Predefined Advanced Settings for information about special settings like PhotoEnhance3 (PhotoEnhance in Windows 3.1).

Follow these steps to check printer settings from your graphics application or other Windows software:

1   Choose **Print**, **Print Setup**, or **Page Setup** from the File menu. You see a printing dialog box.

If you choose **Print**, you first see a Print dialog box that contains the settings you change most often, including the number of copies and the pages you want printed.

Note:
Choose Automatic for
your everyday print jobs.
If you want to print a
special job, such as a
photograph on special
paper, choose Custom.
See **Using Predefined
Advanced Settings**.

2 Make sure your EPSON Stylus COLOR 440 printer is selected, and then click the **Printer**, **Setup**, **Properties**, or **Options** button. (You may have to click a sequence of these buttons.) You see a dialog box like the following:

Main tab

EPSON Stylus COLOR 440 Properties

Main | Paper | Layout | Utility

Media Type
Plain paper

Ink
Color
Black

Mode
Automatic
Custom

Quality — Speed
Custom Settings

Advanced...

Current Settings

Letter — Normal - 360dpi
Portrait — MicroWeave : On
None — High Speed : On
No Watermark — Color Adjustment

EPSON — About

OK | Cancel | Help

Click for more information

If you don't see the dialog box shown above, click the **Main** tab. (The Windows 3.1 dialog box is slightly different.)

3 Make sure the Mode option is set to **Automatic**. This lets the printer software determine the best settings for your print job and is the easiest way to get good printing results on all types of paper.

4 Choose the **Media Type** you want to print on from the following list. If you are not sure which setting to select, refer to Media Loading and Handling Guidelines.

- ◗ **Plain paper**
- ◗ **360 dpi Ink Jet Paper**
- ◗ **Photo Quality Ink Jet Paper**
- ◗ **Photo Paper**
- ◗ **Photo Quality Glossy Film**
- ◗ **Ink Jet Transparencies**

Your media choice may restrict the available range of settings such as print quality or resolution.

5 For the Ink setting, choose **Color** or **Black**.

6 Set the slider in the Mode box to **Quality** or **Speed**. This lets you choose between the highest resolution or the fastest printing for the media you're using. (The slider only appears when **Plain paper** is selected.)

7 If necessary, click the **Paper** tab and choose your paper size, number of copies, orientation, and printable area. See Selecting Paper Size and Orientation for detailed instructions.

8 If you're using Windows 95, Windows 98, or Windows NT 4.0, click the **Layout** tab and check the reduce/enlarge (proportional printing), print layout, and watermark options to make sure they're correct for your print job. See Selecting Print Layout Options for details.

9   Click **OK** when you're finished checking your settings.

10 Click **OK** or **Print** in your application's printing dialog box. You may need to click a sequence of these buttons, depending on the application you are using.

While your document is printing, the EPSON Progress Meter (Windows 95 and Windows 98) or the EPSON Despooler dialog box (Windows 3.1) appears, showing the printing progress and the status of your printer. (See Checking Printer Status for more information.)

Setting Default Printer Options

When you change printer settings through your software application, the settings apply only to the application you're using. To adjust the default settings for all your Windows applications, you can access the dialog box through the Windows 95, Windows 98, or Windows NT 4.0 Printers utility or the Windows 3.1 Control Panel.

Make sure all your software applications are closed before you start. If not, you'll have to close and then reopen them to have the new default settings take effect.

Setting Default Options in Windows 95, Windows 98, or Windows NT 4.0

Follow these steps:

1   Click **Start**, point to **Settings**, and then select **Printers**.

2   Right-click the **EPSON Stylus COLOR 440** icon in the **Printers** window.

3   Select **Properties** (**Document Defaults** in Windows NT). Then click the **Main** tab.

You see the Main dialog box, as shown below. Any changes you make will become the default settings for all your applications and documents. Click **OK** when finished.

EPSON Stylus COLOR 440 Properties

General | Details | Main | Paper | Layout | Utility

Media Type
Plain paper

Ink
Color
Black

Mode
Automatic   Quality ⎯⎮ Speed
Custom   Custom Settings
                  Advanced...

EPSON

Current Settings

Letter	Normal - 360dpi
Portrait	MicroWeave : On
None	High Speed : On
No Watermark	Color Adjustment

EPSON   About

OK   Cancel   Apply   Help

Windows 95, Windows 98, and Windows NT 4.0

Setting Default Options in Windows 3.1

1 Double-click the **Control Panel** icon in the Main group.

2 Double-click the **Printers** icon.

3 Select **EPSON Stylus COLOR 440** from the list of installed printers and click **Setup**. You see the dialog box, shown below.
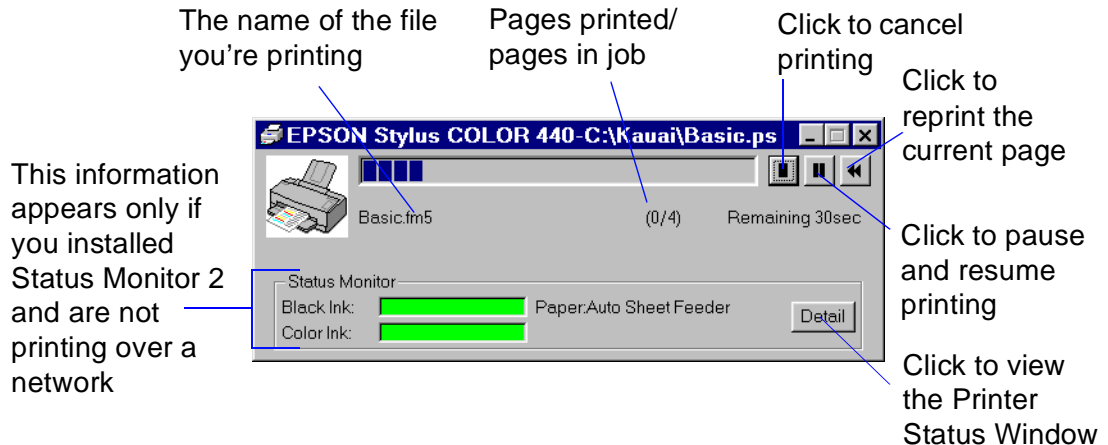

4 Make any changes you want to become the default settings for all your applications and documents, and click **OK** when you are finished.

Checking Printer Status

While your document is printing, your printer software reports how the job is doing. See the section for your operating system below.

Windows 95, Windows 98 and Windows NT 4.0

After you send a print job in Windows 95, Windows 98, or Windows NT 4.0, the Progress Meter dialog box appears on your screen:

The name of the file you're printing

Pages printed/ pages in job

Click to cancel printing

Click to reprint the current page

This information appears only if you installed Status Monitor 2 and are not printing over a network

Click to pause and resume printing

Click to view the Printer Status Window

EPSON Stylus COLOR 440-C:\Kauai\Basic.ps

Basic.fm5   (0/4)   Remaining 30sec

Status Monitor
Black Ink: Paper:Auto Sheet Feeder
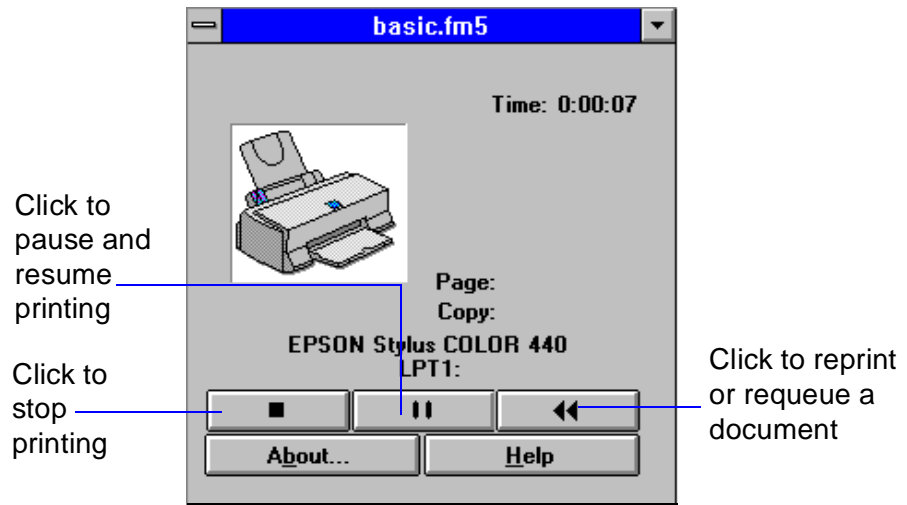Color Ink: Detail

The Progress Meter shows the progress of your print job and the status of your printer. You can use the buttons to cancel, pause, and restart your print job, or to reprint a page. You can select whether to display the Progress Meter dialog box or not; see Selecting the Speed & Progress Options for instructions.

If you installed Status Monitor 2, you also see information about how much ink you have left. See Using Status Monitor 2.

Windows 3.1

After you send your print job, the EPSON Despooler dialog box appears on your screen:

Click to pause and resume printing

Click to stop printing

Click to reprint or requeue a document

This dialog box shows the progress of your print job and the status of your printer. If you run out of paper while printing, for example, the Despooler warns you. You can use the buttons to cancel, pause, and restart your print job, requeue your document for later printing, or reprint all or part of the document.

Windows NT 4.0

Windows NT 4.0 servers and workstations include a messenger service to alert you to printer errors or let you know when a print job is finished. If you have appropriate network access privileges or you're controlling printing from the server, you can also cancel, pause, or restart print jobs and set other options. See your Windows NT documentation for details.

Advanced Printing

When your presentation graphics, photographs, or other projects have special printing requirements, you can use the custom settings in your EPSON Stylus COLOR 440 software. You can choose predefined settings or adjust individual options like brightness, contrast, sharpness, and halftoning.

Your printer software's print layout options let you print almost any size image on your printer, print multiple pages on one sheet of paper, and add watermarks (not available with Windows 3.1).

This chapter includes the following information:

- ◗ Using Predefined Advanced Settings
- ◗ Customizing Print Quality and Special Effects
- ◗ Adjusting Color Settings
- ◗ Selecting Paper Size and Orientation
- ◗ Selecting Print Layout Options
- ◗ Saving Custom Settings

Using Predefined Advanced Settings

Predefined settings provide an easy way to fine-tune your printer's operation for special image types, such as graphics downloaded from the Internet or images produced by a digital camera. Follow these steps to print with predefined settings:
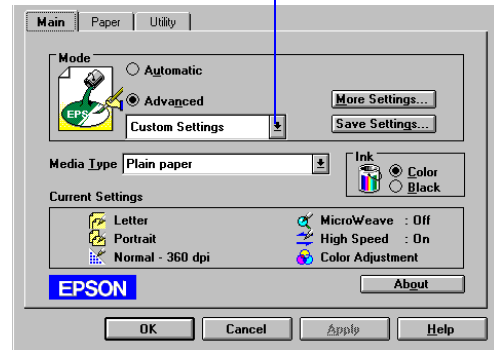
1 Create your image or document in your application software.

2 Access your printer software, as described in Printing from Windows Applications. You see one of the following dialog boxes:

Click Custom, then click here to see a list of project types
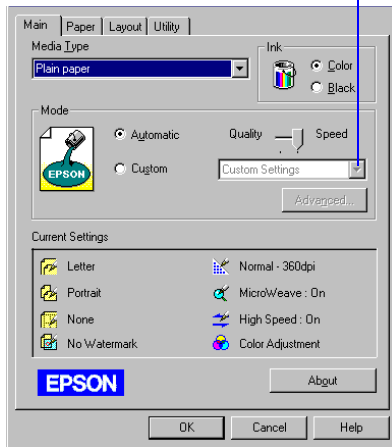
Click Advanced, then click here to see a list of project types

Windows 95, 98, NT

Windows 3.1

3 Choose the **Media Type** you want to print on. (If you're not sure which setting to select, see <u>Media Loading and Handling Guidelines</u>.)

4 Choose **Color** or **Black** ink.

5 Click **Custom** (in Windows 3.1, click **Advanced**), and then click **Custom Settings**. You see the list of project types.

6 Choose the right setting for your project and **Media Type** following these guidelines:

◗ **PhotoEnhance3** (Windows 95, 98, NT) or **PhotoEnhance** (Windows 3.1)
For printing images captured using a video camera, digital camera, or scanner. Produces sharper images and more vivid colors by automatically adjusting the contrast, saturation, and brightness. Corrects for overall under- and over-exposure of the original image.

◗ **Digital Camera** (not available with Windows 3.1)
For printing images taken with a digital camera. Corrects noise or other flaws common to digital camera images.

◗ **Text/Graph**
For printing graphics-intensive documents like presentation pages with charts and graphs. Intensifies colors and lightens the midtones and highlights.

◗ **Economy**
For rough drafts of text only. Saves ink (only available when you set Media Type to **Plain paper**).

- ◗ **ICM** (Windows 95 and Windows 98 only)
  For printing documents created in an ICM compatible application. If you're using an ICM compatible monitor, adjusts colors to closely match the screen color.

- ◗ **sRGB** (recommended for Windows 98 only)
  For printing documents created in an sRGB compatible application using sRGB colors, such as those designed for the World Wide Web. First set up your sRGB compatible devices (such as your monitor and printer) to use an sRGB color profile; see your Windows 98 online help for details.

7 Click the **Paper** tab and **Layout** tab (not available on Windows 3.1) to check or change any necessary settings, as described in Selecting Paper Size and Orientation and Selecting Print Layout Options.

8 When you're finished, click **OK**. Then click any other buttons that your application uses for printing.

Customizing Print Quality and Special Effects

Your printer software automatically selects the best settings for the Media Type you choose. However, if you need maximum control over your project, or you want to experiment with special effects, you can adjust individual settings. For example, you can adjust the resolution, or print quality, of your printout. Follow these steps:

1   Create your image or document in your application software.

2   Access the printer software, as described in Printing from Windows Applications.

3   On the Main dialog box, click **Custom** and then click the **Advanced** button. (In Windows 3.1, click **Advanced**, then click the **More Settings** button.)

You see the Advanced dialog box:

Click here to change your Print Quality ([resolution](#)) after you select Media Type.

Some of these options are automatically set or disabled by other settings you choose.
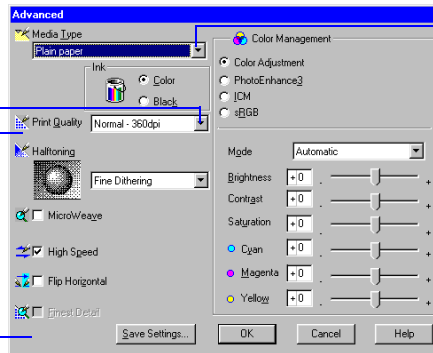
Click here to select the Media Type.

Windows 95, 98, NT

Click here to change your Print Quality ([resolution](#)) after you select Media Type.

Some of these options are automatically set or disabled by other settings you choose.
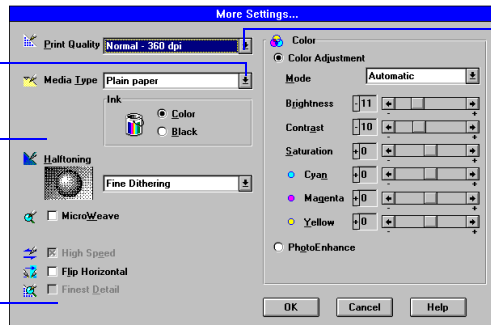
Click here to select the Media Type.

Windows 3.1

4   Choose the **Media Type** and **Ink** settings you want to use, following the guidelines in [Selecting Special Media](#).

5   Choose one of the following **Print Quality** options**:**

◗   **Economy**
For low-resolution rough drafts on plain paper. Saves ink.

◗   **Normal - 360 dpi**
For most documents on plain paper, transparencies, or 360 dpi Ink Jet Paper.

◗   **Fine - 720 dpi**
For high-resolution output on plain paper, Photo Paper, or Photo Quality Ink Jet Paper.

6   Choose one of the following **Halftoning** options:

◗   **No Halftoning**
For printing black text only.

◗   **Error Diffusion**
For printing photographic or video/digital camera images. Blends each color dot with the dots around it.

◗   **Fine Dithering**
For printing graphs or other images that require precise, solid areas of bright colors.

7 Choose any of the following print options:

◗ **MicroWeave**
For improved print quality. Always use for color printing. Prints graphic data in finer increments to eliminate unwanted banding effects (light horizontal lines).

◗ **High Speed**
For fast, bidirectional printing at lower resolution.

◗ **Flip Horizontal**
Prints a mirror image of your document. Use for printing with iron-on transfer paper so your ironed-on printout will read correctly.

◗ **Finest Detail**
For printing text, graphics, and line art with very sharp edges. Slows print speed and increases your system memory requirements.

8 Click **OK** if you're ready to return to the Main dialog box, or see Adjusting Color Settings if you want to adjust your document's color settings.

If vertical lines in your printout are misaligned when you use the High Speed setting, you may need to turn it off or align the print heads. See Aligning the Print Head for instructions.

Adjusting Color Settings

Generally, you won't need to adjust color settings since the printer software automatically detects appropriate settings for your Media Type and project (see <u>Using Predefined Advanced Settings</u>). However, if you want to experiment with color, your software provides a range of options. For example, you can increase or decrease the amount of a specific color, apply a sepia tone to a photograph for an old-fashioned look, or correct the imperfections often found in a digital camera image.

Adjusting Colors in Photos and Scanned Images (Windows 95, 98, and NT only)

The EPSON Stylus COLOR 440 makes it easy to increase color saturation and contrast and improve detail in your photographs and scanned images.

Follow these steps:

1   Access the printer software as described in <u>Printing from Windows Applications</u>. If necessary, click the **Main** tab.

Before adjusting the colors in a photograph, try printing on better quality paper. Colors appear truer on photo quality paper than on plain paper. Check the Media Pack that came with your printer for paper samples.

Note:
If you're running Windows 3.1, use PhotoEnhance to optimize your photographs and scanned images. See <u>Using Predefined Advanced Settings</u>.

2 Click **Custom**, then select either **PhotoEnhance3** or **Digital Camera** in the Custom Settings list box.

3 Click the **Advanced** button.

You see the Advanced dialog box. The Color Management section on the right side of the dialog box appears:

Click to select a Tone setting, if necessary

Click to turn on Digital Camera Correction or Sharpness
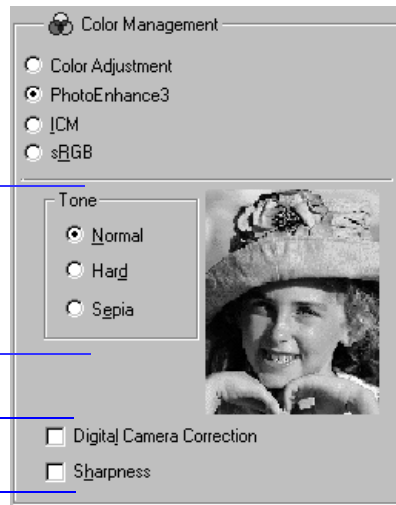
Windows 95, 98, NT

You can also display this screen by selecting the **PhotoEnhance3** radio button shown above.

4 Customize your image using these settings (some settings may be preselected, depending on what you selected in step 2):

▶ Select a Tone setting for your image: **Normal** for standard tones, **Hard** for high contrast, or **Sepia** for an old-fashioned photo look.

▶ Turn on **Digital Camera Correction** to correct noise or other flaws common to digital camera images.

▶ Select **Sharpness** to sharpen the image, especially the edges.

5 Click **OK** to return to the Main dialog box.

Making Custom Color Corrections

Follow these steps to customize your colors:

1 Access the printer software as described in Printing from Windows Applications. If necessary, click the **Main** tab.

2 Click **Custom**. (In Windows 3.1, click **Advanced**.)

3 In the Custom Settings list box, select **Custom Settings** (not available for Windows 3.1), **Text/Graph**, or **Economy**, depending on the document you're printing. See Using Predefined Advanced Settings for information about the Custom Settings list box.

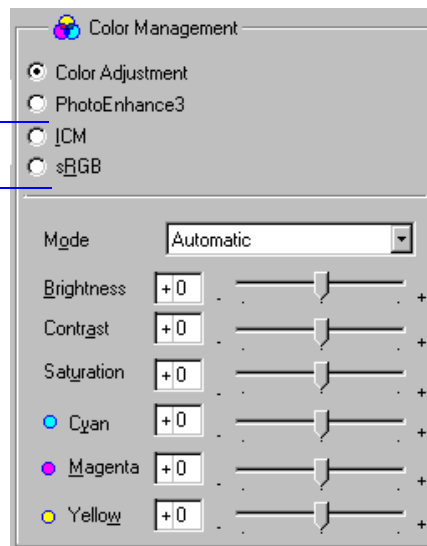**4** Click the **Advanced** button. (In Windows 3.1, click the **More Settings** button.)

You see the Advanced dialog box. The Color Management section appears:

Not available with
Windows 3.1

You can also display this screen by selecting the **Color Adjustment** radio button shown above.

5 Choose one of the following **Color Adjustment Modes**:

◗ **Automatic**
Analyzes the color information in your project and optimizes color correction accordingly.

◗ **Photo-realistic**
For printing color photographs.

◗ **Vivid**
For printing graphics-intensive documents like presentation pages with charts and graphs. Intensifies colors and lightens the midtones and highlights.

◗ **No Color Adjustment**
Disables the color adjustment features of the printer software so you can use a stand-alone color management utility.

6 If you want to specify individual color correction values, use the sliders to increase (drag right) or decrease (drag left) the settings listed below.

◗ **Brightness**
Makes your image lighter or darker.

◗ **Contrast**
Increases or decreases the difference between the bright or dark parts of an image.

◗ **Saturation**
Makes colors more vivid or less vivid.

◗ **Cyan, Magenta, Yellow**
Increases or decreases the amount of the three ink colors that combine to make a full-color picture. Use these sliders to fine-tune the color balance in your printout.

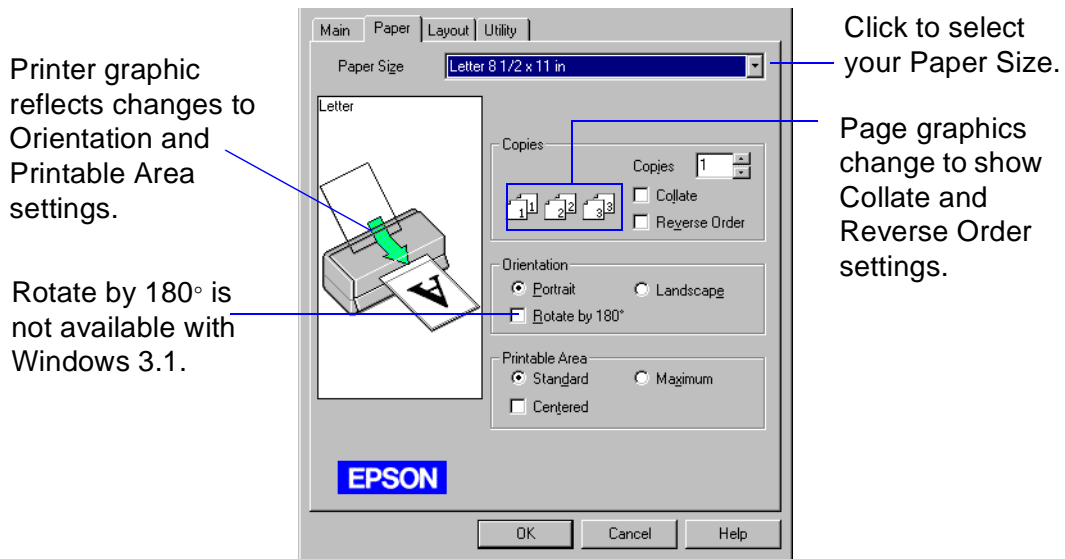**7**   Click **OK** to return to the Main dialog box.

Selecting Paper Size and Orientation

Your printer can print on paper up to 9.5 inches wide and up to 44 inches long in either portrait or landscape orientation. If you print multi-page documents or multiple copies of documents, you can print the pages collated and in reverse order. You can even rotate the printed document by 180 degrees to make it closer to the bottom of the paper (not available with Windows 3.1).

Follow these steps to select paper options on the Paper tab:

1   Create your image or document in your application software.

2   Access the printer software, as described in Printing from Windows Applications.

3   Click the **Paper** tab. You see the Paper dialog box:

Printer graphic reflects changes to Orientation and Printable Area settings.

Click to select your Paper Size.

Page graphics change to show Collate and Reverse Order settings.

Rotate by 180° is not available with Windows 3.1.

| Main | Paper | Layout | Utility |

Paper Size   Letter 8 1/2 x 11 in

Letter

Copies

Copies   1

☐ Collate
☐ Reverse Order

Orientation
◉ Portrait   ○ Landscape
☐ Rotate by 180°

Printable Area
◉ Standard   ○ Maximum
☐ Centered

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OK   Cancel   Help

4   Click the **Paper Size** drop-down list to select the size of paper you loaded in the printer.

Sizes marked with an asterisk (*) are not available with Windows 3.1. These sizes are larger than you can load in the printer and can be used only with the **Reduce/Enlarge** setting on the Layout tab; see Reducing and Enlarging Your Document Size for more information.

|	
A4 210 × 297 mm	**Envelope 132 × 220 mm**
B5 182 × 257 mm	**Photo Paper 4 × 6 in**
A5 148 × 210 mm	**Panoramic 210 × 594 mm**
Letter 8 1/2 × 11 in	**B4 257 × 364 mm** *
Legal 8 1/2 × 14 in	**US B 11 × 17 in** *
Executive 7 1/4 × 10 1/2 in	**A3 297 × 420 mm** *
Half Letter 5 1/2 × 8 1/2 in	**Super A3/B 329 × 483 mm** *
A6 Index card 105 × 148 mm	**B3 364 × 514 mm** *
Index card 5 × 8 in	**A2 420 × 594 mm** *
Index card 8 × 10 in	**US C 17 × 22 in** *
Envelope #10 4 1/8 × 9 1/2 in	**User Defined** (See Creating User Defined Paper Sizes for instructions.)
Envelope DL 110 × 220 mm	
Envelope C6 114 × 162 mm	

5   If you did not or cannot select the number of copies you want to print in your application program's Print dialog box, choose the number (from 1 to 9999) in the **Copies** box. **If you select the number of copies here you don't need to select the number of copies in your application's Print dialog box.**

6   If you're printing multiple copies of a multi-page document and you want the copies printed in sets, click the **Collate** checkbox. The page graphics change to show collated documents.
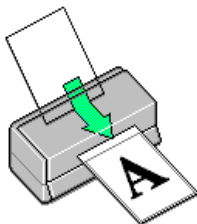
7 If you're printing a multi-page document and want the last page printed first so the pages come out without needing to be reordered, click the **Reverse Order** checkbox. The page graphics change to show later pages printing first.

8 Select the direction of printing on the page using the **Orientation** options. To print your document oriented as shown in one of the following printer graphics, select the options listed below it.
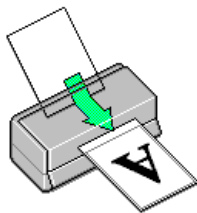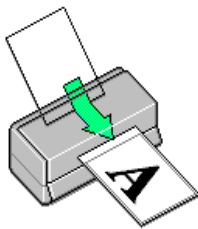

Portrait orientation
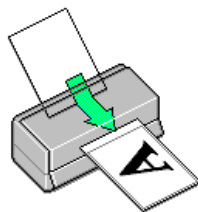
Landscape orientation

Portrait orientation
Rotate by 180°

Landscape orientation
Rotate by 180°

Note:
The Rotate by 180° setting lets you print the opposite portion of a document first, with a bottom margin as small as 0.12 inch (3 mm) and a top margin as small as 0.55 inch (14 mm). This option is not available with Windows 3.1.

9   The **Standard** Printable Area setting uses a minimum bottom margin of 0.55 inch (14 mm). To decrease the minimum bottom margin to 0.12 inch (3 mm), set the Printable Area setting to **Maximum**. To center your document on the page using either setting, select the **Centered** checkbox.

**10**   Click a tab for the settings you want to check or change next, or click **OK** to print your document.

Creating User Defined Paper Sizes

You can create up to 10 custom paper sizes (only one in Windows 3.1) and add them to the **Paper Size** list using the **User Defined** option. This is useful if you're printing a custom size document, such as a banner. You can select any width from 3.5 to 9.5 inches, and any height (length) from 3.5 to 44 inches.

Follow these steps to create a custom paper size with the **User Defined** option:

1   Follow the steps in Printing from Windows Applications to access the printer software, then click the **Paper** tab.

2   Click the **Paper Size** list and scroll to the bottom of it using the arrows or scroll bar.

3   Click the **User Defined** option.

You see one of the following dialog boxes:
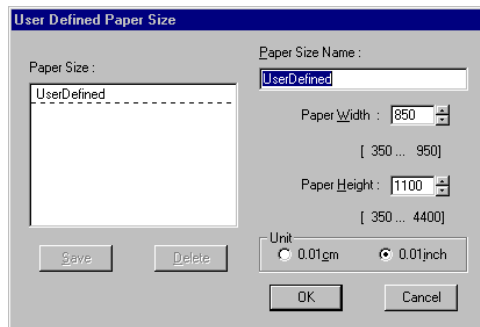
Windows 95, 98, NT
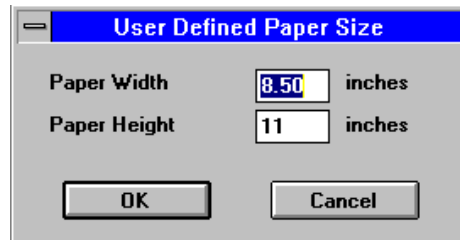
Windows 3.1

Note:
In Windows 95, 98, and NT, the Paper Width and Paper Height units are in hundredth of an inch (or centimeter) increments. For example, 850 equals 8.50 inches.

4 **Windows 95, Windows 98, or Windows NT**
Type a name (up to 24 characters) for your custom paper size in the **Paper Size Name** field. Then select a **Paper Width** and **Paper Height** for the paper. When you're finished, click **Save**. The paper size name appears in the **Paper Size** list. Add more sizes if you want, and click **OK** when you're done.

Windows 3.1
You can create only one **User Defined** paper size. Type the width in the **Paper Width** field and the length in the **Paper Height** field. Then click **OK**.

5 You see the **Paper** tab again. The paper size name you defined is added to the **Paper Size** list and selected as the current setting. (In Windows 3.1, the setting is named **User Defined**.)

To change or delete a custom paper size:

◗ **Windows 95, Windows 98, or Windows NT**
Click **User Defined** in the Paper Size list. Then, on the User Defined Paper Size dialog box, select the custom paper name in the Paper Size list and change the **Paper Width**, **Paper Height**, and/or **Unit** settings as necessary, or click **Delete**. Click **OK** when you're done.

◗ **Windows 3.1**
You can change the custom paper size, but cannot delete it. Click **User Defined** in the Paper Size list. Then, on the User Defined Paper Size dialog box, change the **Paper Width** and **Paper Height** settings as necessary. Click **OK** when you're done.

Note:
Layout options are not available when you're using Windows 3.1.

Selecting Print Layout Options

Your printer software lets you reduce or enlarge almost any size document to print on your printer. You can also select options to proof multiple pages (with or without page frames) on one sheet of paper and add a predefined or custom watermark.

Follow the steps in these sections to use options on the Layout tab:

◗ Reducing and Enlarging Your Document Size

◗ Using Multiple Print Layouts and Page Frames

◗ Adding a Watermark

Reducing and Enlarging Your Document Size

When you want to make the printed size of a document different from its actual size, you can use your printer software's **Reduce/Enlarge** settings. You can make the document fit into the printable area on a selected paper size or you can choose to reduce or enlarge it to a selected percentage.

Follow these steps to reduce or enlarge your document size:

1 Follow the steps in Printing from Windows Applications to access the printer software, then click the **Paper** tab.

2 Click the **Paper Size** list and select the actual size of the document you want to print.

For example, if your document size is 11 × 22 inches, select **US C 17 × 22 in**. This paper size is too large to fit in your printer, so you'll need to proportion it to fit on a **smaller** paper size (by **reducing** the document size). If your document size is 5 × 8 inches, but you want it to fit in the maximum area on Letter-size paper, you'll need to proportion it to fit on a **larger** paper size (by **enlarging** the document size).

3 If the **Paper Size** setting you selected for your document is **within** the maximum paper size that can fit on your printer, but you want to **enlarge or reduce** the document, you need to select the reduction/enlargement manually. Go to step 5.
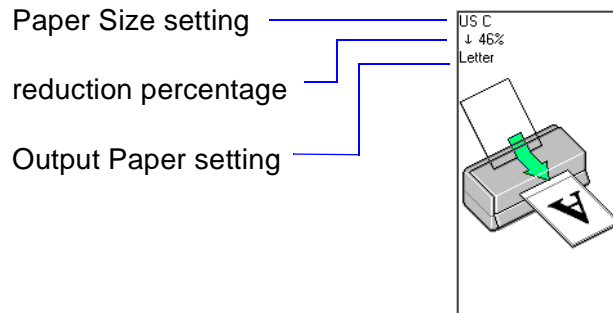
4 If the **Paper Size** setting you selected is **larger** than the maximum size that can be printed on your printer, you see the following dialog box:
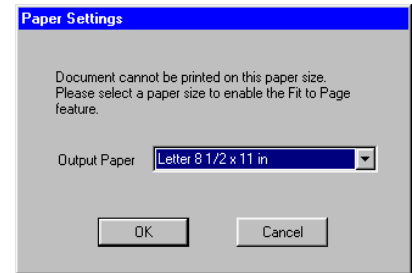
In the **Output Paper** list, select the actual size of the paper loaded in the printer and click **OK**. This automatically turns on the **Fit to Page** setting so your document fits into the printable area on the output paper.

The selected **Paper Size**, reduction percentage, and **Output Paper** settings now appear on the printer graphic. If you want to adjust the proportions or sizes, go to step 5. If you're ready to print, go to step 7.

Paper Size setting ——————

reduction percentage ———

Output Paper setting ———

5 Click the **Layout** tab. You see the Layout dialog box:
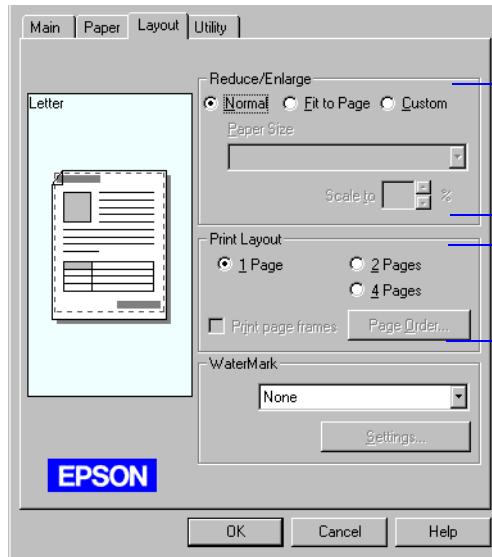
Reduce/Enlarge settings

Not available with Windows 3.1

6 Select one of the following **Reduce/Enlarge** settings:

◗ Select **Normal** to set the print proportion to 100%.

◗ Select **Fit to Page** to automatically reduce or enlarge the document to fit on the paper size loaded in the printer. The **Paper Size** option beneath the **Fit to Page** setting becomes active; select the size of paper loaded in the printer.

Reduce/Enlarge
○ Normal   ◉ Fit to Page   ○ Custom
Paper Size
Letter 8 1/2 x 11 in
Scale to 46 %
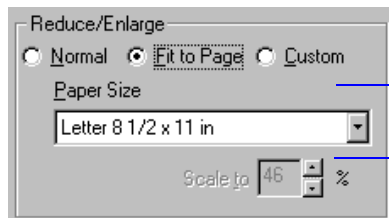
Select Fit to Page, then select the size of paper loaded in the printer here

◗ Select **Custom**, then select a percentage (10% to 400%) in the **Scale to:** field to reduce or enlarge the document by a specific amount.

7 If you're finished selecting Layout options, click **OK**.

If you want to select more options, see Using Multiple Print Layouts and Page Frames.

Using Multiple Print Layouts and Page Frames

If you're printing a multiple page document, but you want a quick proof of the images on each page printed on one piece of paper, you can select Print Layout options in the printer software. You can choose the way the pages are placed on the paper and add a lined frame to each page, if you want.

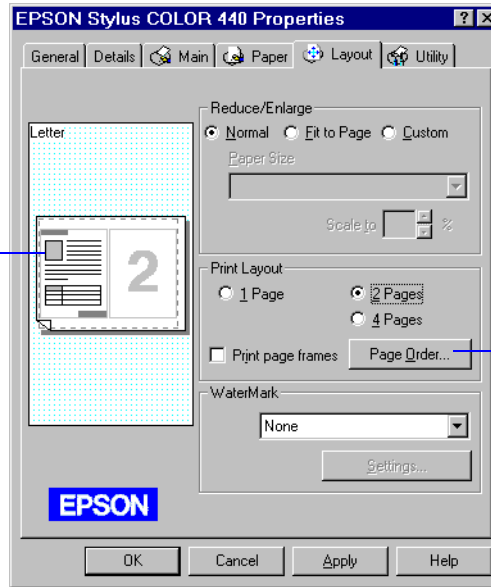Follow these steps to use the Print Layout options:

1 To print multiple pages of your document on one sheet of paper, select either the **2 Pages** or **4 Pages** radio button.
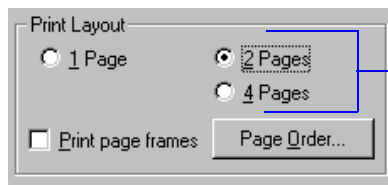
Click a button to select a multiple page print layout

2 If the page order of the layout shown in the printer graphic is how you want your document printed, go to step 3.

Current page order appears here

Click the Page Order button to change page order

To change the page order, click the **Page Order** button. You see the Layout dialog box. Select the page order you want to use and click **OK** to return to the Layout dialog box.

3 If you want to frame each page's contents with a black line, one dot wide, click the **Print page frames** checkbox.

4 If you're finished selecting Layout options, click **OK**.

Adding a Watermark

You can add a watermark to each page in your document to indicate how the document should be handled. For example, you can add "Confidential" to documents you don't want distributed to other people. Or you can add a custom bitmap of your company logo so your document looks like printed letterhead.

Follow these steps to add a watermark:

1 Follow the steps in to access the printer software, then click the **Layout** tab.

2 To select a watermark, click in the **WaterMark** drop-down list.
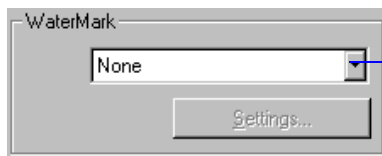
WaterMark
drop-down list

Then highlight one of the following predefined watermarks:

Confidential	**Do Not Copy**
Draft	**For Your Eyes Only**
Urgent	**Review Copy**
Priority	**Top Secret**
Hot	**Duplicate**

To turn off your watermark, select **None** from the drop-down list.

3 To change the watermark or specify how it appears, click the **Settings** button. You see the following dialog box:

See how your selections will look in the Layout graphic shown here
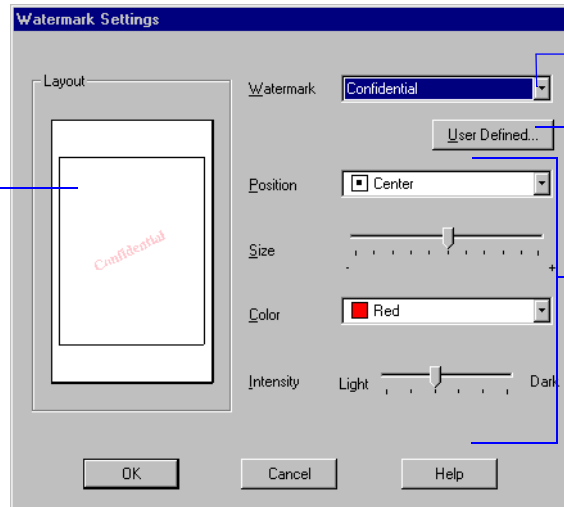
Click here to select a predefined watermark

Click here to load a custom watermark you've created

Specify how you want your watermark to appear using these options

Watermark Settings

Layout

Watermark   Confidential

User Defined...

Position   ☐ Center

Size

Color   ☐ Red

Intensity   Light ___ Dark

Confidential

OK   Cancel   Help

If you want to use a bitmap file to create a custom watermark, continue with step 4. Otherwise, go to step 5.

4 To load a custom watermark you've created as a bitmap in an application program, click the **User Defined** button. You see the following dialog box:

Click Browse to select your bitmap file

Then type a name for your custom watermark here and click Save

Click the **Browse** button. You see the Select a bitmap File dialog box. Navigate to the folder containing the bitmap file you want to use, select the file, and click **OK**. The path to your bitmap file appears in the **File Name** field.

Type a name for the custom watermark (up to 19 characters long) in the **Watermark** field. Click the **Save** button to add it to the list, then click **OK**.

The custom watermark now appears as the selected watermark in the Watermark Settings dialog box and is shown in the Layout graphic.

5 Select the way you want the watermark to appear by choosing the following options. The on-screen graphic changes to reflect all the settings you choose.

- ◗ **Position** selects where you want the watermark to appear on your page: **Center**, **Top-Left**, **Top-Center**, **Top-Right**, **Left**, **Right**, **Bottom-Left**, **Bottom-Center**, or **Bottom-Right**.

- ◗ **Size** adjusts the size of the watermark, either larger or smaller, as you move the slide bar.

- ◗ **Color** lets you choose a color for your predefined watermark: **Red**, **Black**, **Blue**, **Aqua**, **Lime**, **Fuchsia**, or **Yellow**. You cannot select a color for a custom watermark; it is printed in its original colors.

- ◗ **Intensity** sets the lightness or darkness of the watermark (from 5% to 100%) based on where you move the slide bar.

6 Click **OK** to accept the settings and return to the Layout dialog box.

7 If you're finished changing Layout options, click **OK** to close the Layout dialog box. Your changes are applied to the current print job.

If you want to save your settings as a group to use with future print jobs, continue with Saving Custom Settings.

Saving Custom Settings

After you've fine-tuned your printer settings for a special project, you can save the settings as a group. Then you can quickly reuse them the next time you print a similar project.

You can save advanced settings changes, but you can also save more basic settings, such as changes you make on the Paper or Layout tabs. You can save up to 10 groups of settings. Follow these steps:

1 Customize your printer settings, then access the Advanced dialog box, as described in <u>Customizing Print Quality and Special Effects</u>. (In Windows 3.1, access the Main dialog box, as described in <u>Printing from Windows Applications</u>.)

2 Click the **Save Settings** button. You see this dialog box:
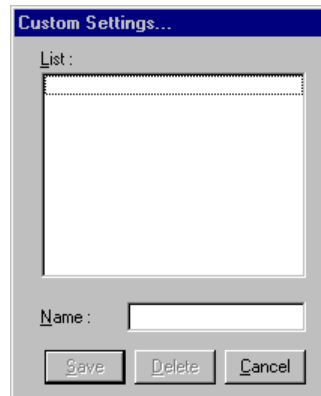
3   Type a unique name for your settings (up to 16 characters) and click the **Save** button.

4   Click **OK** to close the Advanced dialog box (not necessary with Windows 3.1).

The name you choose will now be available in the Custom Settings list on the Main dialog box. To use the settings, click **Custom** (in Windows 3.1, click **Advanced**). Then select the name of your settings group in the Custom Settings list.

To redefine or delete your custom settings, see Redefining Custom Settings or Deleting Custom Settings.

Redefining Custom Settings

To change the options in a customized settings group but keep the same name for it, follow these steps:

1   From the Main dialog box, click **Custom** (in Windows 3.1, click **Advanced**). Then select the name of the custom settings group you want to redefine in the Custom Settings list.

2   Click the **Advanced** button (in Windows 3.1, click the **More Settings** button) and change the printer settings as necessary. (If you change the **Media Type** and **Ink** settings, the custom settings group name reverts to Custom Settings; this doesn't affect your customized setting, but you need to reselect the name in step 4.)

3 Click **Save Settings**. (In Windows 3.1, click **OK**, then click **Save Settings** on the Main dialog box.)

4 Select the name of the custom settings group you're redefining in the Custom Settings dialog box.

5 Click **Save**. You see a message asking if you want to overwrite the previous settings. Click **OK** to save your redefined settings. (Click **Cancel** to cancel your changes.)

Deleting Custom Settings

1 From the Main dialog box, click **Custom,** then click the **Advanced** button. Click **Save Settings** on the Advanced dialog box. (In Windows 3.1, click **Save Settings** on the main printer settings dialog box.)

2 Select the custom settings group in the Custom Settings box, and click **Delete**. Then click **OK** to confirm the deletion. (You cannot delete any of the predefined document types.)

Printing on Special Media

Your EPSON Stylus COLOR 440 lets you print on just about any kind of paper you want to use. You can get great results printing on various sizes of plain paper, letterhead, and envelopes. You'll get even better results with specially coated ink jet paper.

For the best output, use EPSON's photo-quality paper: ink jet paper, glossy paper, glossy film, note cards, and photo paper. For special projects, you can use a variety of EPSON media designed for ink jet printers, ranging from transparencies to iron-on transfer paper.

This chapter covers the following:

◗ Selecting Special Media

◗ Media Loading and Handling Guidelines

Selecting Special Media

When you print on special media, you need to choose the correct **Media Type** and **Paper Size** settings in your printer software. The table below lists the available EPSON media and the corresponding **Media Type** setting for each one.

Media name	Size	Part number	Media Type setting
EPSON 360 dpi Ink Jet Paper	Letter A4	S041060 S041059	360 dpi Ink Jet Paper
EPSON Iron-On Cool Peel Transfer Paper	Letter	S041153 (10 sheets) S041155 (50 sheets)	
EPSON High Quality Ink Jet Paper	Letter A4	S041111 S041117	Photo Quality Ink Jet Paper
EPSON Photo Quality Ink Jet Paper	Letter A4 Legal	S041062 S041061 S041067/S041048	
EPSON Photo Quality Ink Jet Cards	A6[1] 8 × 10 inches	S041054 S041122	
EPSON Photo Quality Self Adhesive Sheets	A4	S041106	

Media name	Size	Part number	Media Type setting
EPSON Photo Quality Glossy Paper	Letter A4	S041124 S041126	Photo Paper
EPSON Photo Paper	4×6 inches Letter A4 Panoramic	S041134 S041141 S041140 S041145	
EPSON Photo Quality Glossy Film	Letter A4 A6[1]	S041072 S041071 S041107	Photo Quality Glossy Film
EPSON Photo Stickers Kit (CD-ROM and sticker sheets) EPSON Photo Stickers (refill, sticker sheets only)	A6[1] A6[1]	S041144-KIT S041144	
EPSON Ink Jet Transparencies	Letter A4	S041064 S041063	Ink Jet Transparencies

[1] A6 paper size is 4.1×5.8 inches.

To order EPSON media, contact your dealer, call EPSON Accessories at (800) 873-7766, or visit our web site at www.epsonsupplies.com (U.S. only). In Canada, please call (800) 873-7766 for dealer referral.

Media Loading and Handling Guidelines

The type of paper or other media you use is one of the most important factors in determining the quality of your printed output. The following tips will help you get the best results on any type of paper or other media.

◗ Be sure to load the printable (whiter) side of the media face up in the sheet feeder.

◗ You can load paper up to the arrow mark on the left edge guide.

◗ Always handle sheets by the edges, and don't touch the printable surface.

◗ In addition to the **Media Type** option, remember to select the correct **Paper Size** for your media on the Paper menu.

◗ If the special media has protective sheets between the sheets of media, be sure to remove the protective sheets before printing.

◗ For most types of paper, set the thickness lever to the **0** position.

◗ Set the thickness lever to the **+** position when you print on envelopes or if ink smears when you print on other thick media. Open the printer cover and position the lever as shown below. Then close the cover and print. (Make sure you return the lever to the **0** position before you print on regular media.)
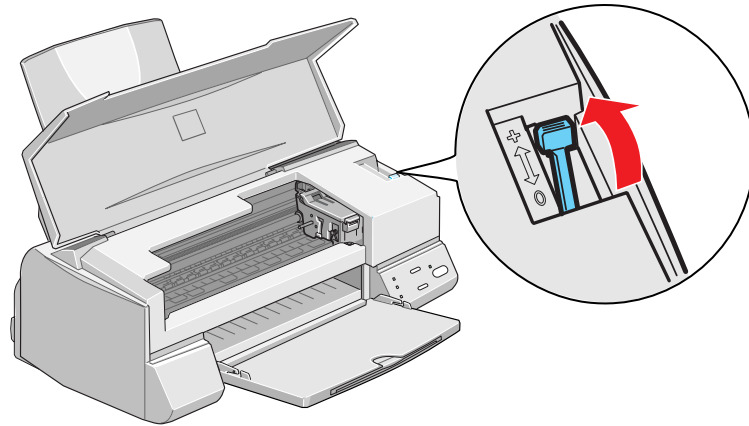
◗ Use ink jet papers within one year of purchase. Use glossy media and transparencies within six months. Return unused sheets and envelopes to their original packages as soon as possible. See Paper for more media storage information.

◗ If paper is curled, make sure to flatten it or curl it slightly in the opposite direction before loading. Printing on curled paper may result in a smeared printout, especially if you select **Maximum** as the Printable Area setting.

- Some media require additional loading instructions. See the following sections for more information about printing on these media:
  - Letterhead, Preprinted Forms, and Legal-size Paper
  - Envelopes
  - EPSON Photo Quality Ink Jet Cards
  - EPSON Ink Jet Paper
  - EPSON Photo Quality Glossy Paper, Film, and Transparencies
  - EPSON Photo Paper
  - EPSON Photo Quality Self Adhesive Sheets
  - EPSON Photo Stickers
  - EPSON Iron-On Cool-Peel Transfer Paper

Letterhead, Preprinted Forms, and Legal-size Paper

Load the top edge first. When you load legal-size paper, pull up the paper support extension and both output tray extensions. Load a maximum of 100 sheets.

Envelopes

You can load up to 10 envelopes flap edge first, with the printable side up, as shown below:
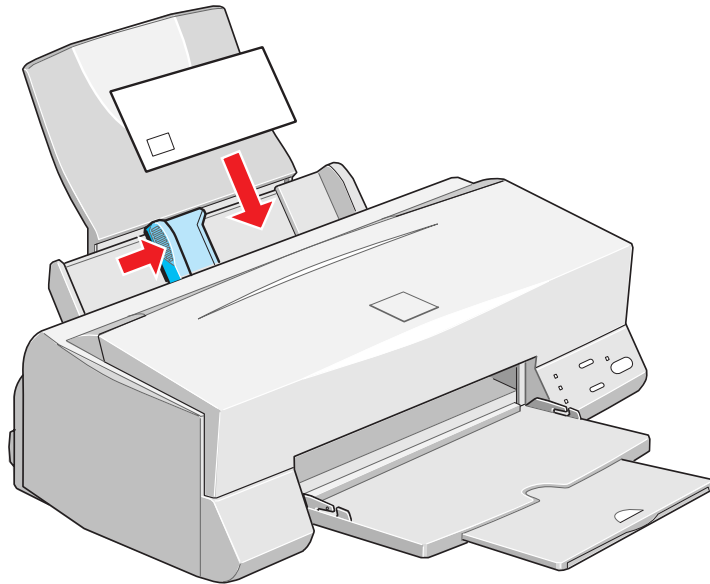
Note:
If the stack of envelopes is more than 0.4-inch (10 mm) thick, press each envelope flat before stacking it or load one envelope at a time.

Select **Plain paper** as the Media Type and choose the correct envelope size as the Paper Size setting in the printer software.

If ink smears when you print on envelopes or other thick media, set the paper thickness lever to the **+** position, as shown below. (Return to the **0** position before printing on other media.)
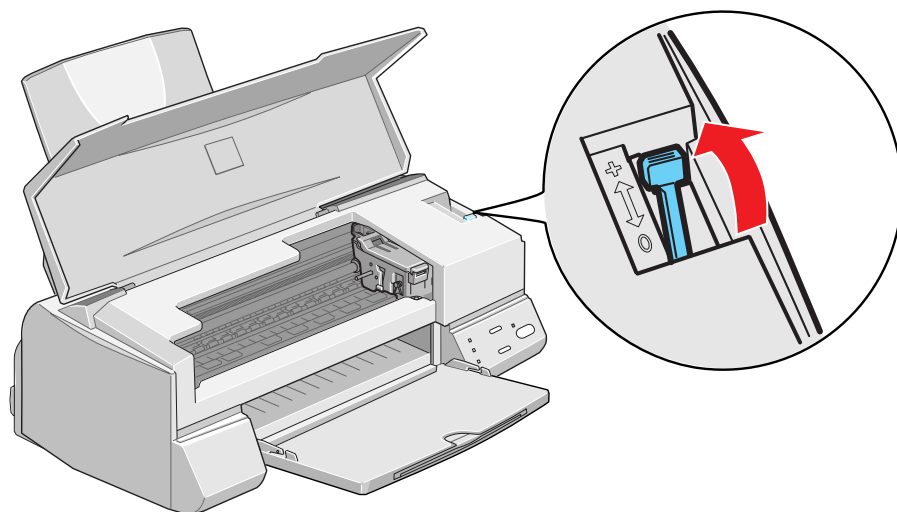
EPSON Photo Quality Ink Jet Cards

Use these cards to print photos or postcards.

You can load up to 30 cards at a time. Always place the included support sheet under the cards. Be sure the cards are against the right edge guide and the left edge guide is against the left edge of the cards.

When you're ready to print, use your software to set the **Paper Size** option for the size card you're using and set the **Media Type** to **Photo Quality Ink Jet Paper**.

If ink smears on the cards, set the thickness lever to the **+** position before printing, as shown on the preceding page.

EPSON Ink Jet Paper

Load up to 65 letter size or 25 legal size sheets.

For EPSON 360 dpi Ink Jet Paper, select **360 dpi Ink Jet Paper** as the **Media Type**.

For EPSON Photo Quality Ink Jet Paper, select **Photo Quality Ink Jet Paper** as the **Media Type**.

EPSON Photo Quality Glossy Paper, Film, and Transparencies

Before you load glossy film or transparencies, put a support sheet (packed with the media) or a plain paper sheet beneath the stack. (Don't use a support sheet with Photo Quality Glossy Paper.)

Load up to 20 sheets of glossy paper or glossy film, or up to 30 transparencies.

For Photo Quality Glossy Film, you may get better results by loading one sheet at a time. With multiple sheets loaded, the minimum top margin you can use is 1.2 inches (30 mm). If you want to use a smaller top margin, load and print one sheet at a time.

If your media has a cut corner, position it in the printer as shown here.

cut corner

printable side face up
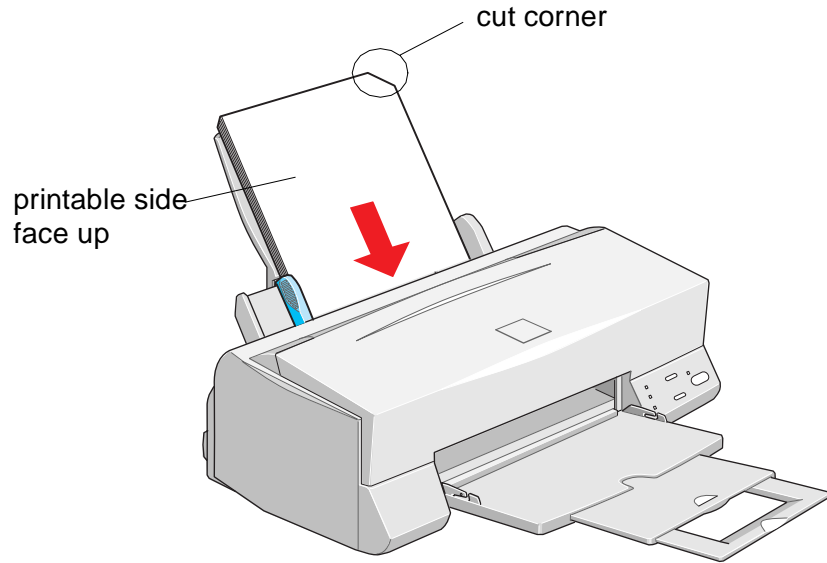
Note:
It's best not to use the **Maximum** printable area setting in the printer software when printing on paper with a cut corner. Part of your document may print in the cut out area.

Remove each sheet from the output tray immediately after it's printed. Make sure each sheet is dry before stacking.

EPSON Photo Paper

You can use EPSON Photo Paper to print photographs that look almost as good as the ones you get from film processing. EPSON Photo Paper is available in several sizes. 4 × 6-inch Photo Paper is perforated around the edges, so you can trim your printouts and "bleed" the photo (extend it to the edge of the paper) on all sides.

You can load up to 20 sheets of 4 × 6-inch, letter-size, or A4-size Photo Paper at a time, or 1 sheet of Panoramic paper at a time. Make sure you place a support sheet behind the paper if it is included in the paper package.

To keep your printouts looking their best, store them in a resealable plastic bag or other airtight covering and protect them from heat, humidity, and direct sunlight. Return unused paper to the original package as soon as you finish printing.

Keep the following in mind when using EPSON Photo Paper:

◗ Load the paper with the whiter (glossier) side facing up.

◗ If you're loading Panoramic Photo Paper, pull up the paper support extension. Then load the Panoramic paper and hold its top edge while your press the ⬇ load/eject button to feed it into the printer.

Press the
⬇ load/eject
button to feed
Panoramic paper
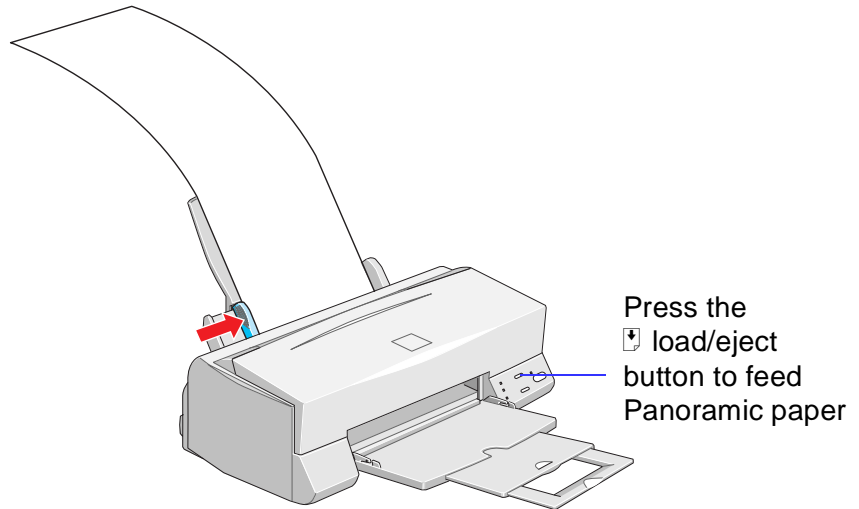
For the Paper size setting, choose **Panoramic 210 × 594 mm**.

Be sure to support your Panoramic Photo Paper as it ejects from the printer so it doesn't fall onto the floor.

◗ If you're using 4×6-inch Photo Paper, follow these steps:

1 Load the paper against the right edge guide with the glossy side facing up and the perforated margins positioned as shown:
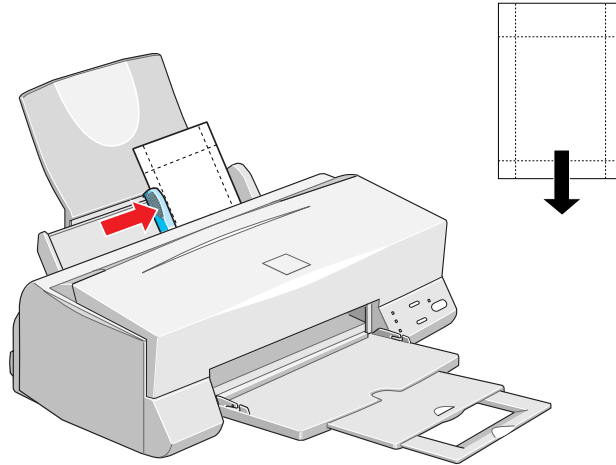
You can load up to 20 sheets of Photo Paper at a time. Make sure you place the included support sheets A and B beneath the stack, but don't print on them. Also, make sure you load the sheets in portrait orientation (short edge first).

2 Slide the left edge guide against the left edge of the paper.

3 When you create the image in your application software, size it to 4.25×6.25 inches. You can also use your printer software's **Reduce/Enlarge** settings, as described in Reducing and Enlarging Your Document Size.

0.67 in

0.24 in

0.12 in

trim size
printed image size

0.12 in 0.24 in
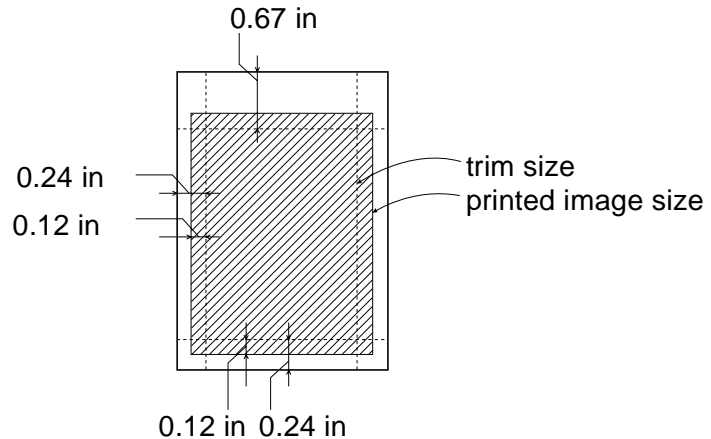
4 Choose **Photo Paper 4 × 6 in** as the **Paper Size** setting and **Maximum** as the **Printable Area** setting.

5 Choose **Photo Paper** as the **Media Type** setting.

6 After you print your picture, fold the paper back and forth along the perforations and carefully tear the margins off.
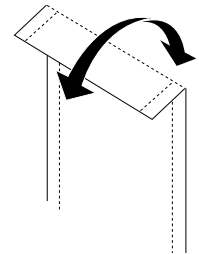
EPSON Ink Jet Transparencies

Before you load transparencies, place the included support sheet or a plain paper sheet beneath the stack. You can load up to 30 transparencies. However, you may get better results by loading one sheet at a time. Select **Ink Jet Transparencies** as the **Media Type** in the printer software.

EPSON Photo Quality Self Adhesive Sheets

Use these sheets to print labels or stickers. You can load one sheet at a time. Make sure your adhesive sheets are fully adhered to their backing sheet before you load them. Set the **Media Type** to **Photo Quality Ink Jet Paper** in the printer software.

EPSON Photo Stickers

Use these sheets of stickers to print small, decorated photos for use on cards, invitations, or other items. You'll need to use an application that creates photo stickers.

Load one sheet of Photo Stickers at a time. Make sure to place support sheets A and B that came with the stickers beneath the sheet. Always load the sticker sheet in portrait orientation (short edge first).

Select **Photo Quality Glossy Film** as the **Media Type** and **A6 Index 105 × 148 mm** as the **Paper Size** setting in the printer software.
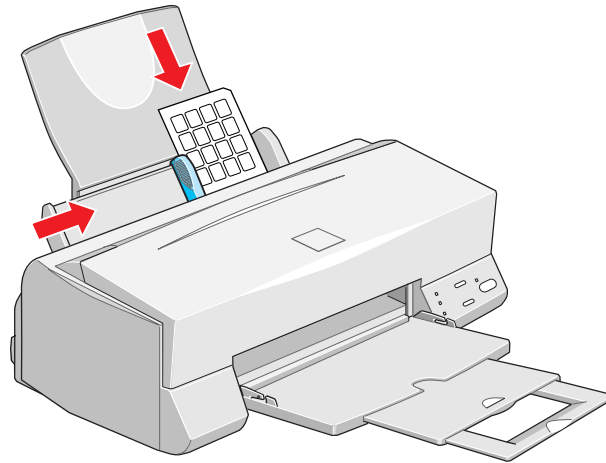
EPSON Iron-On Cool-Peel Transfer Paper

You can print photos, company logos, or anything else you want on these transfer papers, and then iron your images onto T-shirts or other cotton cloth items.

Load one sheet of transfer paper at a time. Select **360 dpi Ink Jet Paper** as the **Media Type** setting.

Make sure you reverse your image before you print it—especially if it includes text—so it will read correctly when it's transferred. You can use the **Flip Horizontal** option in your printer software to do this (see Customizing Print Quality and Special Effects for instructions).

After you print, follow the instructions that came with the paper to iron the image onto the shirt or other item.

Managing Print Jobs

Your printer software includes several utilities for managing print jobs. You can use them to monitor your printer's status, set up large jobs to print later, and handle network printing.

This chapter provides instructions for the following:

◗   Managing Print Jobs in Windows 95, Windows 98, and Windows NT 4.0

◗   Managing Print Jobs in Windows 3.1x

◗   Network Printing in Windows 95 and Windows 98

Managing Print Jobs in Windows 95, Windows 98, and Windows NT 4.0

Your printer software offers three ways to manage and monitor your print jobs in Windows 95, Windows 98 and Windows NT 4.0:

◗ The Progress Meter, which appears each time you send a print job, as described in Checking Printer Status. You can turn the Progress Meter on or off and select other printing options using the **Speed & Progress** button; see Selecting the Speed & Progress Options for details.

◗ The Spool Manager, which appears in the taskbar at the bottom of the screen each time you print, as described in Using the Spool Manager.

◗ Status Monitor 2, which provides a variety of print monitoring options, as described in Using Status Monitor 2.

Selecting the Speed & Progress Options

You can set up the way your printer software sends print jobs and select whether to display the Progress Meter using the Speed & Progress dialog box. To access the dialog box, you must open your printer software from the Windows Printers utility, as described below.

1   Click **Start**, point to **Settings**, then click **Printers**.

2   Right-click the **EPSON Stylus COLOR 440** printer icon and select **Properties** from the drop-down menu. You see the EPSON Stylus COLOR 440 Properties dialog box.

3   Click the **Utility** tab. You see the Utility menu:
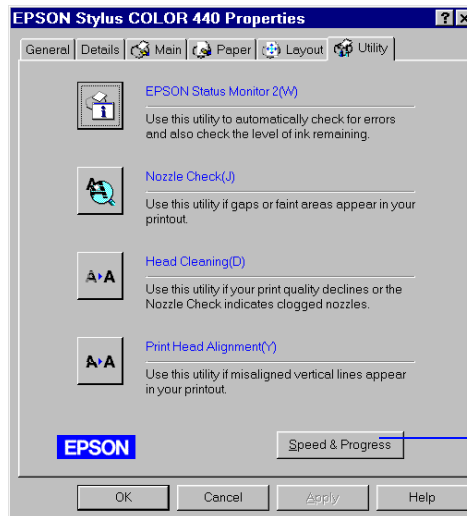
Speed & Progress button

4 Click the **Speed & Progress** button. You see this dialog box:

This section
appears only if
you have more
than one hard
disk drive.
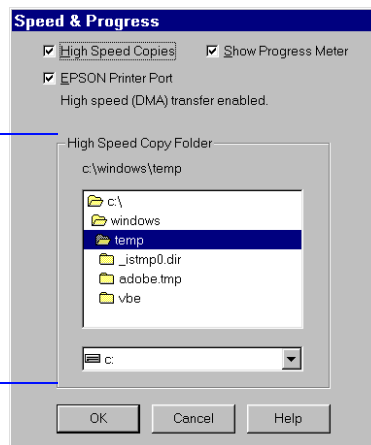
Select from the following options:

◗ **High Speed Copies** speeds up printing of multiple copies
of the same document by using your hard disk space as a
cache.

◗ **Show Progress Meter** lets you control whether or not the
Progress Meter is displayed when you send a print job. See
Checking Printer Status for information on the Progress
Meter.

- ◗ **EPSON Printer Port** lets you optimize the transfer rate of your printer port for EPSON printers instead of using the Windows default printer port.

- ◗ **High speed (DMA) transfer enabled** tells you that you're already using fast DMA transfer mode.

- ◗ **For higher data transfer rates, use DMA transfer** lets you know that you can speed up printing by enabling DMA transfers on your system. See your computer documentation for details.

5 Click **OK** to close the dialog box and return to the Utility menu. Then click **OK** again to close the printer software window.

Using the Spool Manager

The Spool Manager creates a temporary print job file, stores it in the C:\TEMP or C:\WINDOWS\TEMP folder or directory, and assigns it to a print queue. The software then sends the file to your printer at the right time.

To open Spool Manager while you're printing, click the Spool Manager icon that appears on the taskbar at the bottom of the screen.

You see the Spool Manager window:
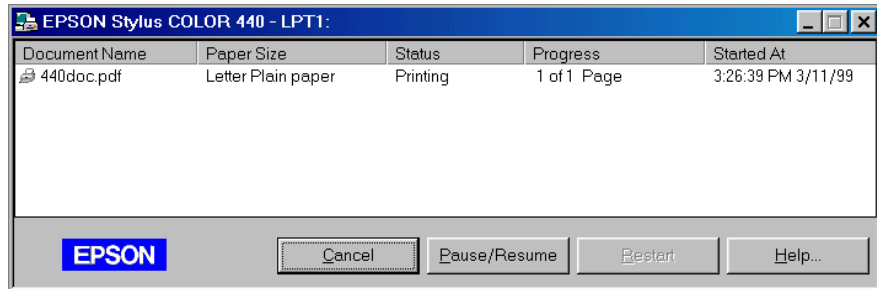
The Spool Manager window displays the status of your print job files and lets you control them. To cancel, pause, resume, or restart a print job, click the job to highlight it; then click one of the command buttons on the bottom of the window.

Deleting a Stalled Print Job

If you're having trouble printing, it may be because of a stalled print job. Follow these steps to delete the stalled job and continue printing:

1 Click the **EPSON Stylus COLOR 440** button on the taskbar.

2 Click on any print jobs marked **Held**.

3 Click the **Cancel** button.

4 Exit the Spool Manager and try printing again.

Using Status Monitor 2

Status Monitor 2 lets you view detailed information about your print jobs and control how you want printing monitored. You can check printer status when your printer is connected directly to your computer or if it is connected to a remote server in a network. Before using Status Monitor 2, you must enable background monitoring, as described in Enabling Background Monitoring.

Enabling Background Monitoring

You can enable background monitoring for your printer if you want Status Monitor 2 to alert you to any error conditions while you're working on other tasks. This lets you know if paper has run out, or if any other printing problem has occurred, without having to open Status Monitor 2.

To turn on background monitoring, follow these steps:

1   Click **Start**, point to **Programs**, point to the **Epson** folder, and click **EPSON Status Monitor 2** to open Status Monitor 2.

2   Click the name of the printer you want to monitor in the Installed Printers list. The printer name is highlighted.

3   Open the Settings menu and select **Background Monitoring**.

4   Select either **Monitor from restart** (to begin background monitoring after your next system restart) or **Monitor now** (to begin background monitoring right away).

Note:
ScanDisk will not run if Status Monitor 2 is performing background monitoring. To disable background monitoring, right-click the 🖳 icon on the Windows taskbar in the bottom right corner of your screen and select Stop monitoring now.

Now set your monitoring preferences for the printer, as described below.

Setting Up Monitoring Preferences

You can select the way you want Status Monitor 2 to monitor each printer you use in the Monitoring Preferences window. There are several ways to open the window:

◗   Click the printer name in the Installed Printers list to highlight it and click the 🔩 icon or select **Monitoring Preferences** from the Settings menu.

◗   Right-click the printer name in the Installed Printers list and select **Monitoring Preferences** from the menu.

You see the Monitoring Preferences window:
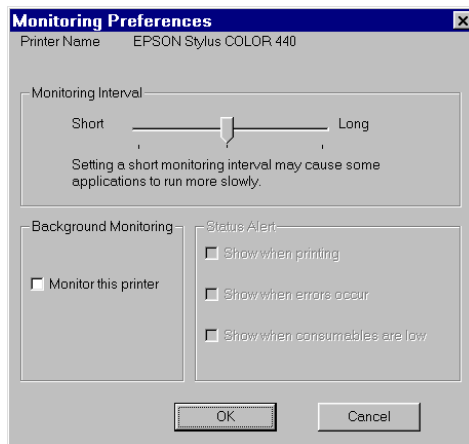
If you turn on one or more of the Status Alert options, you'll see the Status Alert dialog box when the selected condition occurs. For example, if you turn on **Show when errors occur**, the dialog box will appear only if a printing error occurs. If you select all the options, the dialog box will appear whenever you print, encounter an error, or have low ink levels.

The color of the printer icon in the Status Alert dialog box indicates the type of error, as described in Using the Installed Printer Icon.

Click the printer name to highlight it, then click Details to open the Printer Status window. See the table on the next page for more information.

EPSON Status Monitor 2

Printer Name or Path	Status	
EPSON Stylus COLO...	Printing...	

Details   OK
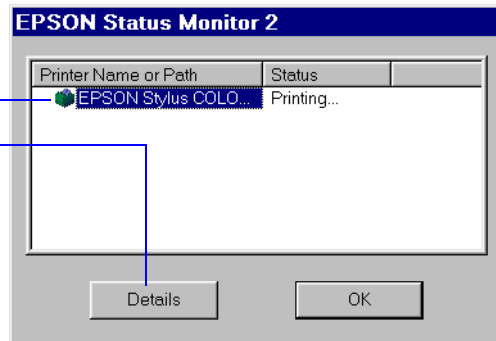
Using the Status Monitor 2 Main Window

Once you've enabled background monitoring for your printer and set preferences, there are several ways to access the Status Monitor 2 main window:

◗   Double-click the 🖨 icon on the Windows taskbar in the bottom right corner of your screen.

◗   Click **Start**, point to **Programs**, click the **Epson** folder, and click **EPSON Status Monitor 2**.

When you start Status Monitor 2, you see the main window:

If you have more than one printer you want to monitor, you can add them using the **Add Printer** option in the Settings menu. To save system resources, you may want to delete any printers from the Status Monitor 2 list that you don't need to monitor. To do this, click the printer in the Installed Printers list and select **Delete Printer** from the Settings menu.

Using the Installed Printer Icon

The color of the Installed Printer icon indicates the printer status as follows:

Installed Printer icon color	Status message
Green	Ready to print.
Yellow	Paper and/or ink level is low.
Red	Paper and/or ink is out, paper is jammed, or a print or communication error has occurred.
Gray	Printer not detected.

Using the Printer Status Window

For more details on the status of your printer, you can use the Printer Status window. There are several ways to open the window:

◗ Double-click the printer name in the Installed Printers list.

◗ Click the printer name in the Installed Printers list to highlight it and click the 🖳 icon or select **Printer Status** from the Printer menu.

◗ Right-click the printer name in the Installed Printers list and select **Printer Status** from the drop-down menu.

◗ If you're currently using the printer software, click the **Utility** tab, then click the **EPSON Status Monitor 2** icon. (For instructions on accessing your printer software, see Setting Printer Options from Windows Applications and Setting Default Options in Windows 95, Windows 98, or Windows NT 4.0.)

◗ You can also access the Printer Status window by clicking the **Detail** button on the Progress Meter (see Checking Printer Status) or the Status Alert dialog box (see Setting Up Monitoring Preferences).

You see the Printer Status window. The Current Status tab gives printing status and error correction information.

Illustrations of what to do if an error occurs appear here

If your printer runs out of ink, click this button to display cartridge replacement steps on the right and illustrations in the printer graphic area
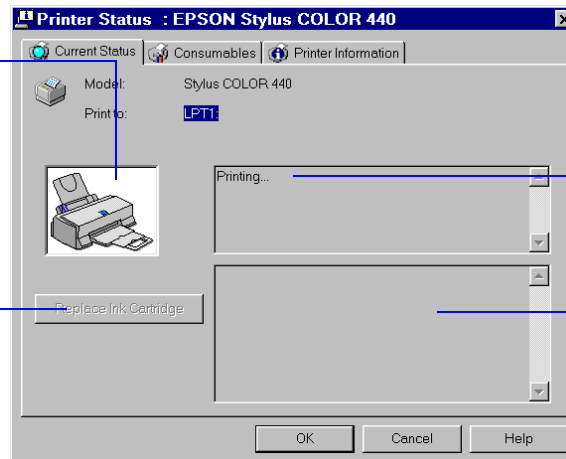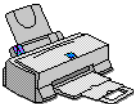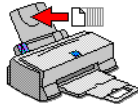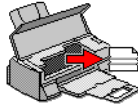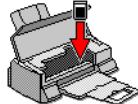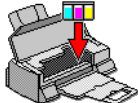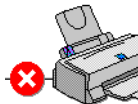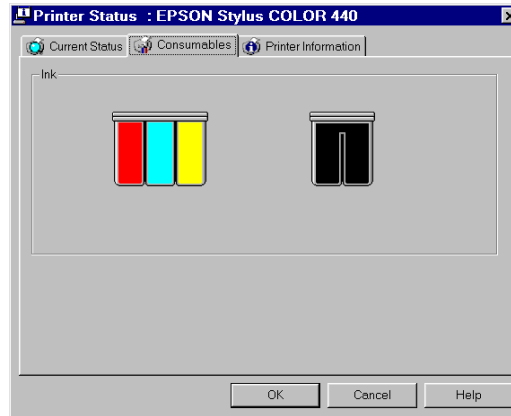
Printer status messages appear here

If an error occurs, troubleshooting tips appear here

The printer graphic in the Printer Status window gives status and error condition information:

Status and Error Conditions

Graphic	Condition
	Ready to print
	Paper isn't loaded correctly
	Paper is jammed
	Black ink is out
	Color ink is out
	A communication error has occurred
	Another type of printer error has occurred

To check the amount of ink you have, click the **Consumables** tab.

The Printer Information tab does not monitor information for this printer.
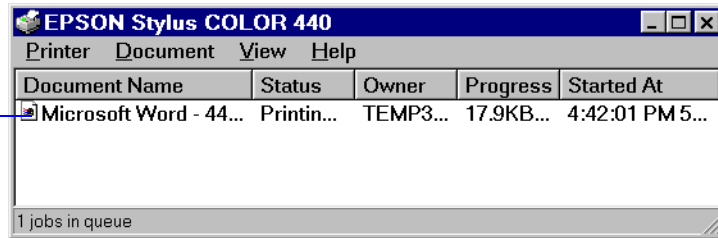
Using the Job Status Window

To view detailed information on the print jobs waiting to print on your printer, you can use the Job Status window. There are several ways to open the window:

◗　Click the printer name in the Installed Printers list to highlight it and click the 🔲 icon or select **Job Status** from the Printer menu.

◗　Right-click the printer name in the Installed Printers list and select **Job Status** from the menu.

You see the Job Status window:

Printing
information
appears
here

Document Name	Status	Owner	Progress	Started At
Microsoft Word - 44...	Printin...	TEMP3...	17.9KB...	4:42:01 PM 5...

EPSON Stylus COLOR 440

Printer Document View Help

1 jobs in queue

Options in the Printer menu let you pause printing or purge all print jobs for the printer, select or deselect the printer as your Windows default, and access the printer software to change default settings.

The Document menu options let you pause or cancel printing of individual printing jobs. Click the print job you want to pause or cancel in the Document Name list to highlight it.

Managing Print Jobs in Windows 3.1x

Your Windows 3.1x printer software includes two management utilities: the Spool Manager and Despooler.

◗ The Spool Manager starts automatically when you send a job to the printer. It allows you to print in the background while you continue to work on your computer and to hold jobs to print at a later time. If you're using your printer on a network, it also handles multiple print jobs that come in at the same time. See Using the Spool Manager for details.

◗ The Despooler also starts automatically when you send a job to the printer. It displays printer status, as described in Checking Printer Status.

Using the Spool Manager

The Spool Manager works like the Windows 3.1x Print Manager. When you send a job to your printer, your printer software creates a temporary print file, stores it in the C:\TEMP or C:\WINDOWS\TEMP folder or directory, and assigns it to a print queue. The software then sends the file to your printer at the right time.

◗ To open it while you're printing, click the **Spool Manager** icon that appears at the bottom of your desktop.

◗ You can open the Spool Manager at any time by double-clicking the **Spool Manager4** icon in the EPSON program group.

You see the Spool Manager window:

EPSON Spool Manager			
Queue Document **View** **Options** **Help**			
Printer/Document Name	**Status**	**Size**	**Time**
EPSON Stylus COLOR 440 on LPT1:	**Active**		
Write - README.WRI	Printing page 1	4 pages (56K)	3:35 6/22/98

The Spool Manager window displays the status of your print queues and print jobs and lets you control them. You can also control the display of the Despooler and the default spool directory. Click **Help** in the Spool Manager menu bar for detailed information.

Deleting a Stalled Print Job

If you're having trouble printing, it may be because of a stalled print job. Follow these steps to delete it and continue printing:

1   Open the Spool Manager as described above.

2   Click on any print jobs marked **Held**, then open the Document menu and click **Delete**.

3   Click **Yes**.

4   Exit Spool Manager and try printing again.

Changing the Default Spool Directory

If you get an error message when you try to print, or printing is very slow, you can try changing your default spool directory.

1   Make a directory on your hard disk where you want Spool Manager to store print job files, for example, C:\SPLTEMP.

2   Open the Spool Manager as described in <u>Using the Spool Manager</u>.

**3**   Choose **Default Spool Directory** from the Options menu.

4 In the dialog box, change the spool directory to the one you created in step 1. Then click **OK**.

5 Make sure **EPSON Stylus COLOR 440** is selected, and then choose **Setup** from the Queue menu. The Queue Setup dialog box appears.

6 Make sure the spool directory is the one you created in step 1. Also make sure **Use Print Manager for this port** is checked. Then click **OK**.

7 Close Spool Manager.

Network Printing in Windows 95 and Windows 98

If you want to print to a remote printer through a Windows network in Windows 95 or Windows 98, you must first set up your system as a client computer which can use the printer on a remote server. To set up the print server, see your Windows documentation. To set up your system as a client, follow the instructions below:

1 Make sure your printer software is installed (see the *Printer Basics* guide for installation instructions).

2 Click **Start**, point to **Settings**, then click **Printers**.

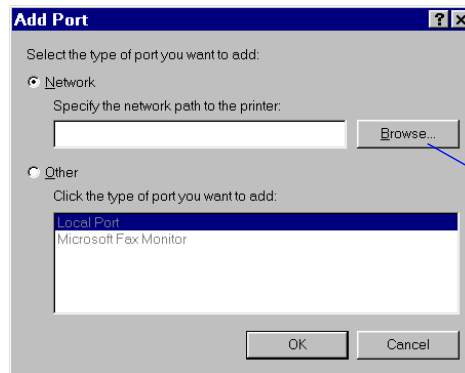**3** Right-click the icon of your printer, and click **Properties**.

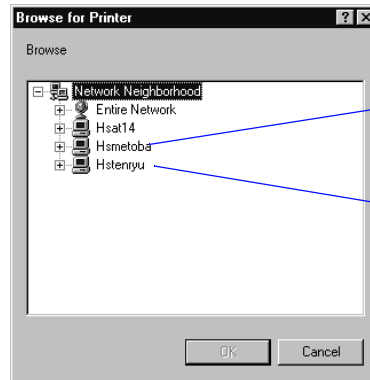**4** Click the **Details** tab. Then click the **Add Port** button.
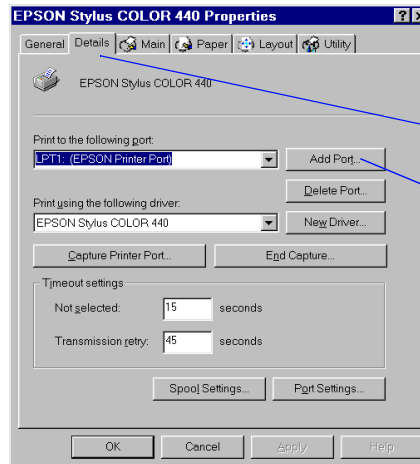
Click this tab

Then click here

5 In the following dialog box, click **Browse**.

Click here to specify the network path

6 Double-click the icon of the computer that is directly connected to the printer. Then click the icon of the printer you plan to use on the network.

Select the computer that is connected to the printer

Select the printer

7 Click **OK** and follow the messages on the screen.

Now you can use the printer connected to the print server over the network from the client computer.

Setting Up Your Printer as a Shared Printer

Follow these steps to share your printer with others on the network:

1   Click **Start**, point to **Settings**, then click **Control Panel**.

2   Double-click **Network**.

3   Click **File and Print Sharing**. The following dialog box appears:
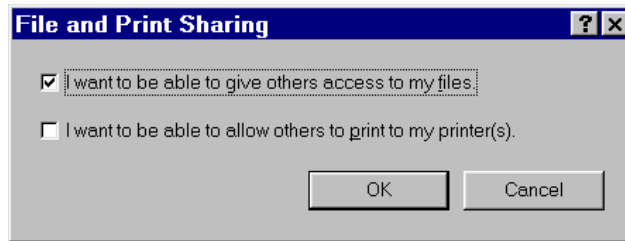
4   Click the **I want to be able to allow others to print to my printers** check box, then click **OK**.

5   In the Network window, click **OK**. Then restart your computer.

6   In the Control Panel window, double-click **Printers**.

7 Select your printer and choose **Sharing** from the file menu. The following dialog box appears.
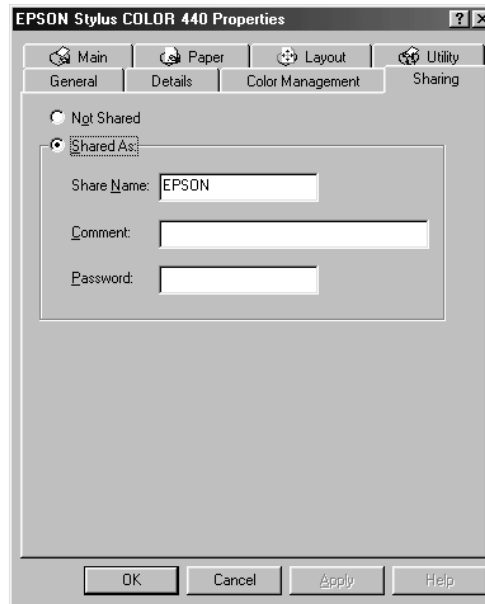
8 Enter a network name for your printer in the **Share Name** text box.

9 If you want, enter a password in the **Password** text box. Then click **OK**.

Maintenance and Transportation

It's easy to keep your EPSON Stylus COLOR 440 printer working at its best. All you have to do is follow the simple instructions in this chapter for replacing ink cartridges, moving the printer, and performing routine maintenance.

This chapter covers the following procedures:

◗ Cleaning the Print Head

◗ Replacing an Ink Cartridge

◗ Aligning the Print Head

◗ Cleaning the Printer

◗ Transporting the Printer

Cleaning the Print Head

If your printed image is unexpectedly light or faint, or dots are missing from the image, you may need to clean the print head. This unclogs the print head nozzles so they can deliver ink properly.

Cleaning the print head uses ink, so clean it only if print quality declines. You can use either of the following to clean the print head:

◗ The Head Cleaning utility (recommended) in your printer software (if the printer is on a local port, not on a network)

◗ The printer's control panel buttons

Using the Head Cleaning Utility

Follow these steps to run the utility:

1 Make sure the printer is turned on but not printing, and that the ◉ black and ◉ color ink out lights are off.

2 Access the printer settings dialog box as described in Setting Printer Options from Windows Applications.

3 Click the **Utility** tab. You see the Utility menu.

4 Click the **Head Cleaning** button.

5   Follow the instructions on the screen to clean the print head. Cleaning takes about two minutes, during which the printer makes some noise and the ⏻ power light flashes.

When the ⏻ power light stops flashing, you need to run a nozzle check to confirm that the print head nozzles are clean and to reset the printer's cleaning cycle.

6   Make sure paper is loaded in the printer and click **Nozzle Check**. Then click **Next**. See Examining the Nozzle Check Pattern for instructions on examining the nozzle check pattern.

7   Do one of the following:

◗   If your print quality has not improved, click **Clean** to clean the print heads again. If you don't notice any improvement after doing this two or three times, check Improving Print Quality.

◗   If the pattern looks okay, click **Finish** to close the Nozzle Check screen.

# Using the Control Panel

Follow these steps to clean the print head:

1 Make sure the printer is turned on and not printing, and that the ◗ black and ♨ color ink out lights are off.

2 Press the ♨ cleaning button and hold it down for three seconds. Cleaning takes about two minutes, during which the printer makes some noise and the ⏻ power light flashes.

After the cleaning cycle is complete and the ⏻ power light stops flashing, you need to run a nozzle check to confirm that the print head nozzles are clean and to reset the printer's cleaning cycle.

3 Access the printer settings dialog box as described in Basic Printing.

4 Click the **Utility** tab. You see the Utility menu.

5 Click the **Nozzle Check** button**.** Then click **Next**. See the next section for instructions on examining the nozzle check pattern.

If your print quality has not improved, repeat the steps above. If you don't notice any improvement after doing this two or three times, check the print quality solutions in Improving Print Quality.

Caution:
Never turn off the printer while the ⏻ power light is flashing, unless the printer hasn't moved or made any noise for more than 5 minutes.

Examining the Nozzle Check Pattern

Examine the nozzle check pattern after printing it. It should look something like this, with each of the three sections showing one of the ink colors:
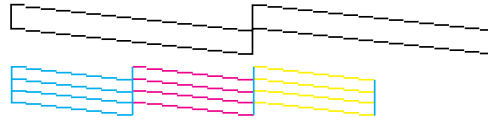
Each staggered horizontal and straight vertical line should be complete, with no gaps in the dot pattern. If your printout looks okay, you're done. If any dots are missing, as shown below, clean the print head again, as explained in the previous sections.
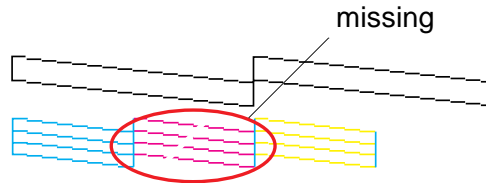
missing

Replacing an Ink Cartridge

When a ⬥ black or ♨ color ink out light flashes, the indicated cartridge is low on ink. This is a good time to make sure you have a new cartridge. When the light stays on, the cartridge is empty and you need to replace it. You cannot print if either ink cartridge is empty. You can also check your ink levels using the Status Monitor. See Using the Printer Status Window for details.

Use these EPSON ink cartridges within six months of installing them and before the expiration date on the package:

◗ Black ink cartridge: S020187

◗ Color ink cartridge: S020191

When you need new ink cartridges, contact your dealer or call EPSON Accessories at (800) 873-7766 or visit our web site at www.epsonsupplies.com (U.S. only). In Canada, please call (800) 873-7766 for dealer referral.

Removing an Empty Ink Cartridge

You can replace a cartridge when the ⬤ black or 🌢 color ink out light is either flashing or on.

Follow these steps:

1   Make sure the printer is turned on and not printing.

2   Determine which cartridge needs to be replaced.

3   Lower the output tray and raise the printer cover.

4   Press the ꙫ cleaning button and hold it for three seconds.

    The print head moves slightly to the left and the ⏻ power light begins flashing. (The print head returns to its home position if you don't proceed to step 5 within 60 seconds.)

5 Pull up the ink cartridge clamp. The cartridge rises up from its holder. (Although the illustration shows the color ink cartridge, the procedure is the same for replacing the black ink cartridge.)
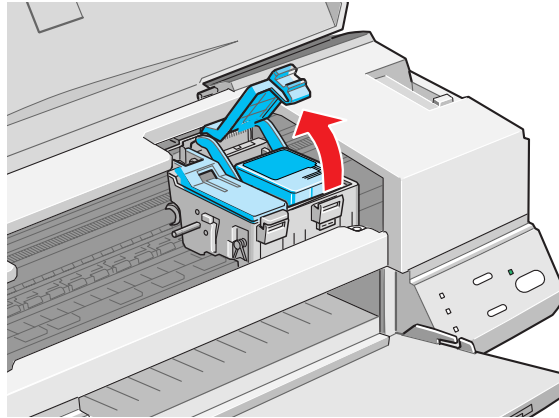
6 Lift the cartridge out of the printer and dispose of it carefully.

7 Follow the steps in the next section to install the new ink cartridge.

Installing the New Cartridge

Once you have removed the empty cartridge, you're ready to install the new one. Follow these steps:

1   Remove the new ink cartridge from its packaging.

2   Remove only the **yellow** part of the tape seal on the top of the cartridge. Do not remove the blue label.
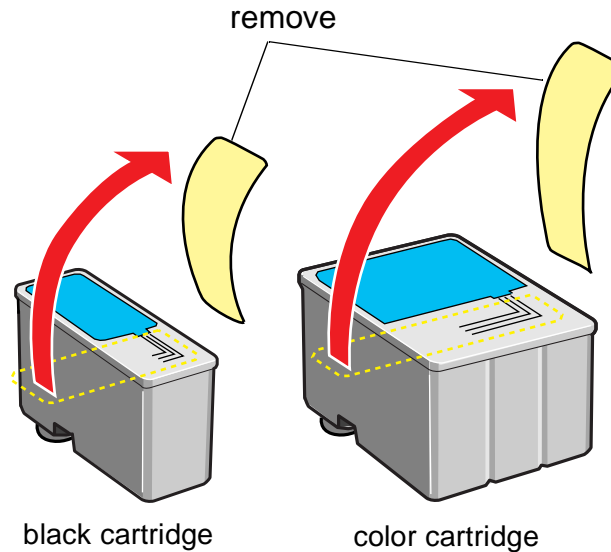
remove

black cartridge   color cartridge

3 Lower the ink cartridge into its holder with the blue label facing up and toward the back of the printer. The larger cartridge (color) goes on the right, and the smaller cartridge (black) goes on the left.
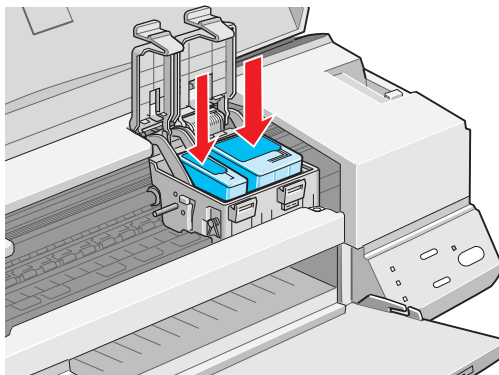
4 Press down the ink cartridge clamp until it locks in place.
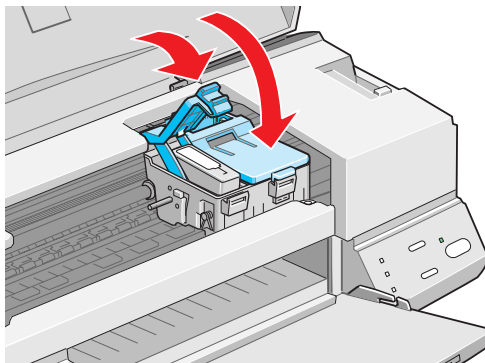
5 If you need to replace the other ink cartridge, remove it as described in <u>Removing an Empty Ink Cartridge</u>. Then follow steps 1 through 4 in this section.

6 Press the 🖤 cleaning button and close the printer cover.

The printer moves the print head and begins charging the ink delivery system. (Even if you don't press the button, ink charging begins 60 seconds after you close the clamp.)

The ⏻ power light flashes and the printer makes various sounds. Charging takes about two minutes. When it's finished, you can print again.

Replacing an Outdated Ink Cartridge

If an ink cartridge is more than six months old, you may need to replace it. How can you tell? You may notice that your printouts don't look as good as they used to. If print quality doesn't improve after cleaning and aligning the print head, you can replace one or both cartridges.

Follow these steps to replace an ink cartridge before the ⬥ black or ⬥ color ink out light is flashing or on:

1   Make sure the printer is turned on and not printing.

2   Lower the output tray and raise the printer cover.

3   Press the ⬇ load/eject button and hold it down for a few seconds until the print head moves to the left.

4   Pull up the ink cartridge clamp. The cartridge rises up from its holder.

5   Lift the cartridge out of the printer and dispose of it carefully.

6   Follow the steps in the previous section, Installing the New Cartridge to install the new ink cartridge.

Caution:
To avoid damaging the printer, never move the print head by hand.

Aligning the Print Head

If your printouts contain misaligned vertical lines, you may need to align the print head. Follow these steps:

1 Make sure the printer is turned on and paper is loaded.

2 Access the printer settings dialog box as described in Basic Printing.

3 Click the **Utility** tab. You see the Utility menu.

4 Click the **Print Head Alignment** button.

5 Follow the instructions on the screen to print a test page and select the correct alignment.

For best results, use EPSON ink jet paper whenever you check the print head alignment.

Cleaning the Printer

To keep your printer working at its best, you should clean it several times a year, following these steps:

1 Turn off the printer, unplug the power cord, and disconnect the printer cable.

2 Remove all the paper from the sheet feeder.

3 Clean the exterior of the printer with a soft, damp cloth. Keep the printer cover closed so water doesn't get inside.

4 Clean ink out of the printer's interior with a damp cloth.

Transporting the Printer

If you want to move your printer some distance, you need to prepare it for transportation and repack it in the original box. Follow these steps:

1   Turn on the printer and wait until the print head locks in the far right position. Then turn off the printer.

2   Unplug the power cord from the electrical outlet. Then disconnect the interface cable from the printer.

3   Remove any paper from the sheet feeder and remove the paper support.

4   Push in the output tray extensions and close the tray.

5   Repack the printer and attachments in the original box using the protective materials that came with it. See the Unpacking Sheet that was packed with the printer.

Be sure to keep the printer flat as you transport it. If you notice a decline in print quality after transporting the printer, clean the print head (see Cleaning the Print Head); if output is misaligned, align the print head. See Aligning the Print Head.

Troubleshooting

As you use your printer, you may occasionally experience a paper jam or other problem. The first thing you should do is diagnose the problem, following the guidelines in this chapter. Then try the most likely solutions until the problem is fixed.

This chapter tells you everything you need to know about the following:

◗ Diagnosing Problems

◗ Improving Print Quality

◗ Solving Printing Problems

◗ Solving Printer Software Problems

◗ Fixing Paper Problems

◗ Solving Miscellaneous Printout Problems

◗ Uninstalling Printer Software

◗ Where To Get Help

Diagnosing Problems

Your printer includes a number of ways to help you diagnose problems:

◗ To identify the most common problems, check the lights on the printer's control panel. See Checking the Control Panel Lights.

◗ You can also use the Status Monitor utility to identify common problems. For instructions, see Using Status Monitor 2 (not available for Windows 3.1x).

◗ To determine whether the problem is caused by the printer itself, run a printer operation check. See Running a Printer Check for instructions.

◗ For the latest information, check the EPSON Stylus COLOR 440 and Status Monitor Help programs and ReadMe files in the EPSON program group or folder.

◗ There are additional troubleshooting tips in the "Problems, Need Help" section of your *Printer Basics* guide.

◗ If none of the suggested solutions in this chapter solve your problem, contact EPSON as described under Where To Get Help.

Checking the Control Panel Lights
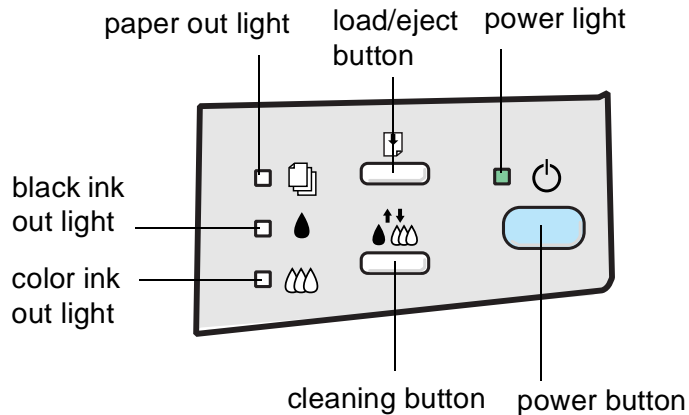
The four lights on your printer's control panel show the printer's status and alert you to problems like paper jams.

❏ When the paper out light comes *on,* your paper ran out or is incorrectly loaded. Load paper in the sheet feeder and then press the ⊡ load/eject button.

❏ When the paper out light *flashes*, you have a paper jam. Turn off the printer and gently pull out all the paper. Check the stack and remove any paper that's curled, creased, or damaged. Then reload the paper, turn on the printer, and press the ⊡ load/eject button. Make sure to place the paper against the right edge guide, then slide the left edge guide over to the paper's left edge.

♦ or ✿   When an ink out light *flashes*, your ink supply is low. Make sure you have a replacement cartridge.

♦ or ✿   When an ink out light comes *on*, you need to replace the ink cartridge. See [Replacing an Ink Cartridge](#) for instructions.

⏻   The power light is *on* when the printer is on. The power light *flashes* when the printer is receiving a print job or performing a maintenance operation, such as cleaning a print head.

⏻ 🗐 ♦ ✿   When the ⏻ power and 🗐 paper out lights *flash* and the ♦ black and ✿ color ink out lights are *on*, you have a paper jam. Turn off the printer by pressing the ⏻ power button. Wait several seconds; then turn it on again. If no paper ejects, turn off the printer, remove the jammed paper, and turn the printer on again. If this doesn't solve the problem, contact EPSON as described in [Where To Get Help](#).

○ ▯ ● ▨   When all the lights flash, your printer may have an internal error. Turn off the printer by pressing the ○ power button; wait several seconds; then turn it on again. If this does not clear the error condition, contact EPSON as described in the [Introduction](#).

○ ▯ ● ▨   When all the lights are off, the printer is not receiving power. Try these solutions:

- ◗   Make sure the printer is turned on.
- ◗   Turn off the power and plug the power cord into the outlet again.
- ◗   Plug a lamp into the outlet to make sure the outlet is working. Also, make sure the outlet isn't controlled by a switch or timer.

Running a Printer Check

You can run a printer check to determine whether the problem comes from the printer itself or some other source.

◗ If the results are satisfactory, the problem lies in software settings, the interface cable, or your computer.

◗ If the printer check does not print correctly, there is a problem with your printer. See the suggestions in this chapter for possible solutions.

Follow these steps to check the printer:

1 Make sure both the printer and computer are turned off.

2 Disconnect the interface cable from the printer.

3 Make sure paper is loaded in the printer.

4 Hold down the ⊡ load/eject button and press the ⏻ power button. Hold down the buttons until the ⏻ power light starts to flash. Then release both buttons.

The printer prints one page containing the printer's ROM version, ink counter code, character table number, and a nozzle check pattern. Only the nozzle check pattern is shown below:
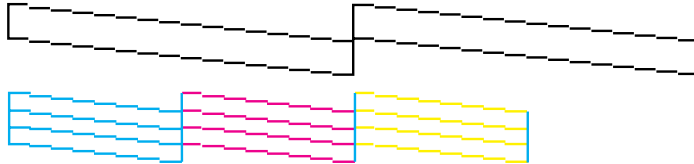
5 After it prints the page, turn off the printer. Remember to reconnect the interface cable, then turn on the printer and your computer.

6 Compare the quality of the printed nozzle check pattern with the sample above. In particular, look for missing segments in the lines, which may indicate a misaligned print head or clogged ink nozzle.

Improving Print Quality

You can often improve print quality by doing one of the following:

◗ Clean the print head; the print head nozzles may be clogged (see Cleaning the Print Head for instructions).

◗ Use higher quality paper appropriate for your print job (see Selecting Special Media for a list of EPSON papers).

◗ Match the Media Type setting in the printer settings dialog box to the type of media you loaded in the printer. Then the printer software can automatically select other settings for the best quality (see Basic Printing and Printing on Special Media for details).

◗ Select **Automatic** as your print mode (see Setting Printer Options from Windows Applications for details).

◗ Turn off **High Speed** mode (see Customizing Print Quality and Special Effects for details).

◗ Turn off **Economy** mode (see Customizing Print Quality and Special Effects for details).

◗ Replace the ink cartridges. If an ink cartridge is low on ink (the ◐ black or ✿ color ink out light is flashing) or the ink cartridge is more than six months old, the cartridge should be replaced. See Replacing an Ink Cartridge for instructions.

◗ If you have vertical misalignment, run the Print Head Alignment utility (see <u>Aligning the Print Head</u> for instructions) or turn off High Speed mode.

Try the solutions listed above before trying these solutions to specific print quality problems.

The printed image has horizontal banding

Possible cause	Solution
The printable side of the paper is face down.	Remove the paper and reload it with the printable side face up. See <u>Media Loading and Handling Guidelines</u> for instructions.
The **MicroWeave** option is not set.	Turn on **MicroWeave** in the Advanced dialog box. See <u>Customizing Print Quality and Special Effects</u> for more information.
The ink nozzles are clogged.	Run the Head Cleaning utility to clear any clogged ink nozzles. See <u>Using the Head Cleaning Utility</u>.
The **Maximum Printable Area** setting in your printer software is turned on.	When the **Maximum Printable Area** setting is turned on, banding may occur in the expanded area. Deselect this setting on the Paper tab in your printer software.

The printed image has incorrect or missing colors

Possible cause	Solution
Ink is set to **Black**.	Change the **Ink** setting to **Color**. See Setting Printer Options from Windows Applications for instructions.
The printable side of the paper is face down.	Remove the paper and reload it with the printable side face up. See Media Loading and Handling Guidelines for instructions.
The **Halftoning** option is set incorrectly for your document type.	Use the correct settings for the project you're printing, following the instructions in Using Predefined Advanced Settings.
The **Color Adjustment Mode** option is set incorrectly for your document type.	Use the correct settings for the project you're printing, following the instructions in Customizing Print Quality and Special Effects.
The **ICM** (Windows 95 and 98) settings are incorrect for your document.	Use the **Automatic** mode setting or choose a different project type. See Advanced Printing for more information.
The ink cartridges are low on ink or one or more ink colors are empty.	Check the ◆ black and ♨ color ink out lights to see which cartridge you may need to replace. See Replacing an Ink Cartridge for instructions.

Possible cause	Solution
The colors displayed on your monitor don't match the printed colors.	Because your monitor and printer use different technologies to represent colors, your printed colors cannot exactly match the colors you see on your monitor screen. Use the **ICM** (Windows 95 and 98) or **sRGB** (recommended for Windows 98 only) setting. See Using Predefined Advanced Settings for more information.
The color settings in your application software need adjustment.	You may be able to adjust various color settings in your application software. See your software documentation for more information.

The printed image is blurry or smeared

Possible cause	Solution
The loaded paper is damaged, old, or dirty.	Remove the paper and reload a new stack with the printable side face up. See Media Loading and Handling Guidelines for instructions.
The printer's thickness lever is in the 0 position.	Set the thickness lever to the + position and try printing again. See Envelopes for instructions.
The paper is curled toward the printable side.	Remove the paper. Flatten it or curl it in the opposite direction before reloading it.
The paper is damp or the printable side is face down.	Remove the paper and reload a new stack with the printable side face up. See Media Loading and Handling Guidelines for instructions.

Possible cause	Solution
Media Type is set incorrectly in your printer software, or you loaded special media without a support sheet.	Follow the special media loading instructions in Media Loading and Handling Guidelines and on the paper packaging for media that require support sheets. Also try loading your media one sheet at a time.
You tried to print on cardboard or other non-recommended media.	Make sure your paper or media meets the specifications listed in Specifications. If your printouts are still blurry after you change paper, clean the print heads as described in Cleaning the Print Head.
Ink has leaked inside the printer.	Clean carefully inside the printer to remove spilled ink. See Cleaning the Printer for instructions.

Color documents print in black and white

Possible cause	Solution
Your printer is not selected in your application.	Select your printer and port in your software application.
Color printing is not selected.	Select **Color** as the **Ink** setting in your printer software. See Setting Printer Options from Windows Applications.

The printed image is faint or has gaps

Possible cause	Solution
The ink nozzles are clogged.	Run the Head Cleaning utility to clear any clogged ink nozzles. See Using the Head Cleaning Utility.
The paper is old, damaged, or dirty.	Remove the paper and reload a new stack with the printable side face up. See Media Loading and Handling Guidelines for instructions.
The ink cartridges are low on ink, or one or more ink colors are empty.	Check the ♦ black and ✿ color ink out lights to see which cartridge you may need to replace. See Replacing an Ink Cartridge for instructions.

Characters are incorrect or garbled

Possible cause	Solution
Your printer is not the Windows default printer.	Select your printer as the default Windows printer. See your Windows documentation or Windows online help for instructions.
Printing is stalled.	Delete the stalled print jobs in Spool Manager (see Deleting a Stalled Print Job for instructions).
The interface cable is not securely connected.	Turn off your printer and computer. Then make sure the cable is connected securely and meets the printer's specifications.

Possible cause	Solution
You're using a switch box with your printer.	Connect the printer directly to your computer and try printing again.
Your video driver may be conflicting with the EPSON printer driver.	Try using a standard VGA video driver (see your computer or video card documentation for instructions on changing video drivers). If your printout is correct, your video driver is interfering with the printer driver. Contact your computer or video card manufacturer to see if an updated driver is available.

Solving Printing Problems

If the printer won't print, first check that:

◗ The printer is turned on and the ⏻ power light is on, but not flashing.

◗ Paper is loaded in the printer.

◗ The printer is plugged into a working electrical outlet that's not controlled by a switch or timer.

◗ The interface cable is securely connected to the printer and computer and both are turned on.

If you upgrade to Windows 98 from Windows 95 or Windows 3.1x after installing your printer software, uninstall the printer software, then install it again. See <u>Uninstalling Printer Software</u> for instructions.

If you still can't print, check the following solutions.

All lights are off

Possible cause	Solution
The printer is not receiving power.	Try these solutions: ◗ Make sure the printer is turned on. ◗ Make sure the power cord is securely plugged in. ◗ Try using another power outlet. Make sure the outlet is not controlled by a switch or timer.

Only the ⏻ power light is on, but nothing prints

Possible cause	Solution
The interface cable is not connected securely.	Turn off your printer and computer. Then make sure the cable is connected securely and meets the printer's specifications. (Use a fully shielded IEEE-1284 parallel cable.)
The printer has an internal problem.	Turn off the printer and computer, disconnect the interface cable, and run a printer check as described in Running a Printer Check.
Your printer software or application software is installed incorrectly.	If you ran a printer check successfully, make sure your printer and application software are installed correctly. If you're printing on a network, you may need to set up your printer for network printing, as described in Network Printing in Windows 95 and Windows 98.

Possible cause	Solution
Your computer doesn't have enough memory to handle the data in the file you are printing.	Try one of the following: ◗ Reduce the resolution of your image. ◗ Select fewer colors or a lower resolution for your monitor. ◗ Add more memory to your computer.
A print job is stalled.	Delete the stalled print job(s) in Spool Manager; see Deleting a Stalled Print Job for instructions.

The printer sounds as though it is printing, but nothing prints

Possible cause	Solution
The print head nozzles are clogged.	Clean the print head nozzles; see Cleaning the Print Head for instructions. If this does not work after two or three times, see below.
One or both of the ink cartridges are too old.	Try cleaning the print head. If that doesn't work, replace the ink cartridges as described in Replacing an Outdated Ink Cartridge.

The ▯ paper out light is flashing or on

Possible cause	Solution
If flashing, paper is jammed.	Remove the paper and follow the guidelines for preventing jams in Fixing Paper Problems.
If on, paper is used up or loaded incorrectly.	Load paper or remove the stack and reload it as described in the *Printer Basics* guide or Media Loading and Handling Guidelines. Then press the ▯ load/eject button to turn off the light and resume printing.

A ● black or ●○ color ink out light is flashing or on

Possible cause	Solution
If flashing, the ink supply is getting low.	You need to replace the indicated ink cartridge soon. Make sure you have a new cartridge, then see Replacing an Ink Cartridge for instructions.
If on, the ink cartridge is empty.	You must replace the indicated ink cartridge; see Replacing an Ink Cartridge for instructions.

The ▯ paper out and ⏻ power lights are flashing

Possible cause	Solution
A carriage error has occurred.	Remove any paper in the printer. Press the ▯ load/eject button for about 30 seconds. Then press it again. Turn the printer off, wait a few seconds, and then turn it on and try printing again. If the error is not cleared, contact EPSON as described in Where To Get Help.

All the lights are flashing

Possible cause	Solution
You haven't removed all the packing material from the printer.	Remove the packing material, following the instructions on the Unpacking Sheet in the box.
An internal error may have occurred.	Turn off your printer, wait a few seconds, and turn it on again. If the lights still flash or stay on, contact EPSON as described in Where To Get Help.

The printer has finished charging the ink cartridge, but the ⏻ power light is still flashing

Possible cause	Solution
The ink cartridge clamp isn't locked down.	Press down on the clamp to lock it into place.
Packing material remains in the printer.	Remove the packing material, following the instructions on the Unpacking Sheet in the box.
The printer needs to initialize.	If the printer is not moving or making noise, but the light is still flashing after 5 minutes have passed, turn the printer off. If the light is still flashing when you turn it back on, contact EPSON as described in Where To Get Help.
The printer may be receiving data from the computer.	Turn the printer and computer off. Disconnect the printer from the computer. Turn the printer on. If the light continues to flash for more than 5 minutes, contact EPSON as described in Where To Get Help.

Solving Printer Software Problems

If you have trouble with your printer software, first check that your printer is selected as the default Windows printer; see your *Printer Basics* guide.

If you still have problems with your printer software, check the following solutions. If you need to uninstall the printer software, see Uninstalling Printer Software.

After you install your printer software, you see the Windows 95 or 98 New Hardware Found window

Possible cause	Solution
An operating system error has occurred.	Click **Do not install a driver**, and then click **OK**. **Never select any other option on the New Hardware Found window**.

In Windows 95, 98, or NT 4.0 the Status Monitor 2 window doesn't appear

Possible cause	Solution
You may not have restarted your computer after installing Status Monitor 2.	Click **Start**, select **Shut Down**, click **Restart the computer**, and click **Yes** to restart your computer. Then try using Status Monitor 2.
Bi-directional support is not enabled.	Make sure your printer is connected to your computer with a bi-directional cable. Then click **Start**, select **Settings**, and click **Printers**. Right-click the **EPSON Stylus COLOR 440** icon and select **Properties**. Click the **Details** tab, then click the **Spool Settings** button. Click the **Enable bi-directional support for this printer** radio button to turn on bi-directional support. Click **OK** twice, then close the Printers window and try printing again.

After you install your printer software, you can't run ScanDisk (Windows 95 and 98)

Possible cause	Solution
You cannot use ScanDisk if Status Monitor 2 is active.	Disable Status Monitor 2 whenever you want to run ScanDisk. See Enabling Background Monitoring for details.

You see a spooling error message

Possible cause	Solution
Spooling error messages or very slow printing may be caused by temporary files.	Change the Spool Manager default spool directory, following the instructions on Changing the Default Spool Directory.
Your hard drive is too full.	Delete unnecessary files to make room on the drive.
Your computer doesn't have enough memory for the file you're printing.	Try one of the following: ◗ Reduce the resolution of your image. ◗ Select fewer colors or a lower resolution for your monitor. ◗ Add more memory to your computer.

You cannot print on a network in Windows NT 4.0

Possible cause	Solution
Your printer is not set up correctly as a remote printer.	You may need to use a different network path and printer port. Select a different port in the printer's Properties windows or enter the new network path to your printer at the DOS prompt. Then restart your computer. See your Windows NT documentation for instructions on changing the printer port and network path.
Your printer software is installed incorrectly.	Try uninstalling the printer software. See Uninstalling Printer Software.

Printing is too slow

Possible cause	Solution
Your printer software options are set incorrectly.	For the fastest printing, try the following: ◗ Set **Print Quality** to **Economy**. ◗ Turn **MicroWeave** off. ◗ Turn **High Speed** on. ◗ Choose **Black** ink and **No Halftoning**. See Basic Printing and Advanced Printing for more information.

Possible cause	Solution
Your system doesn't have enough resources.	◗ Clear space on your hard disk and run a defragmentation utility. ◗ Don't run too many applications at the same time. ◗ Increase your system's memory (RAM).
You originally installed your printer software on a different version of Windows.	If you upgraded to Windows 98 from Windows 95 or 3.1x, uninstall the printer software, then install it again. See Uninstalling Printer Software for instructions.

Fixing Paper Problems

You can avoid most paper handling problems by doing the following:

◗ Use smooth, high-quality media designed for ink jet printers that meets the media specifications in Specifications.

◗ Follow all loading and handling instructions included with the media.

◗ Load the media with the printable side face up, as described in the *Printer Basics* guide or in Media Loading and Handling Guidelines.

If you have problems with paper feeding, paper jams, or ejected paper, check here for solutions.

Paper doesn't eject fully or is wrinkled

Possible cause	Solution
If the paper doesn't eject fully, you may have set the wrong paper size.	Press the ⏏ load/eject button to eject the paper. Then make sure you select the correct paper size in your application or printer software. (See Paper for the paper sizes you can print with.)
If it's wrinkled when it comes out, the paper may be damp or too thin.	See Paper for paper thicknesses you can print with, as well as environmental requirements for storage.

Paper doesn't feed

Try this	Then do this
Remove the stack of paper from the sheet feeder.	Check that the paper:

Check that the paper:

- ◗ Isn't curled or creased.

- ◗ Isn't too old (see Media Loading and Handling Guidelines or your paper packaging for more information).

- ◗ Isn't loaded above the arrow on the left edge guide.

- ◗ Isn't jammed inside the printer. (If the paper out light is flashing, paper is jammed.)

Then reload the paper as described in Media Loading and Handling Guidelines, making sure the left edge guide is adjusted to fit the paper's width.

Paper jams inside the printer

Try this	Then do this
Turn off your printer, open the cover, and remove all the paper that's inside, including any small pieces that may have torn off.	Reload the paper as described in the *Printer Basics* guide and Printing on Special Media. If your paper jams frequently, make sure you:
	◗ Use smooth, high-quality paper, loaded printable side up (the printable side is usually whiter).
	◗ Fan the stack and then even the edges before loading it.
	◗ Don't load paper above the arrow mark on the left edge guide.
	◗ Adjust the left edge guide to fit the width of your paper.

Multiple pages feed at the same time

Try this	Then do this
Remove the stack of paper from the printer.	◗ Make sure the paper isn't too thin (see Paper).
	◗ Fan the edges of the stack of paper to separate the sheets.
	◗ Reload the paper as described in the *Printer Basics* guide and in Printing on Special Media.
	◗ Make sure the paper edge guides are snug against the edge of the paper.
	◗ If too many copies of a page or document are printing, check the **Copies** settings in both the printer software and your application program. See Selecting Paper Size and Orientation for more information.

Solving Miscellaneous Printout Problems

If your printout results are not what you expected, try these solutions.

The margins are incorrect

Possible cause	Solution
Margins are set incorrectly in your software application.	Check your software documentation for instructions on selecting the correct margins for your paper size. Make sure the margins are within the printable area of the page. See Specifications for more information.
Paper settings in the printer software are incorrect for your paper size.	Select the correct paper settings for your paper size. Make sure the **Printable Area** setting is correct for your project. See Basic Printing and Printing on Special Media for more information.

The image is inverted, as if viewed in a mirror

Possible cause	Solution
You used a **Flip Horizontal** option in your application software or the printer software.	Turn off the **Flip Horizontal** or mirror setting in your application software or the printer software. See Customizing Print Quality and Special Effects for information.

The printer prints blank pages

Possible cause	Solution
Your printer is not the Windows default printer.	Select your printer as the default Windows printer. See your Windows documentation or Windows online help for instructions.
Paper settings in the printer software are incorrect for your paper size.	Select the correct paper settings for your paper size. See Basic Printing for more information.
The print head nozzles are clogged.	Clean the print head following the instructions in Cleaning the Print Head.

Uninstalling Printer Software

If any of the suggested solutions in this chapter tell you to uninstall and then reinstall your printer software, follow the steps in this section.

Windows 95, Windows 98, and Windows NT 4.0 Instructions

1   Click **Start**, point to **Settings**, and then click **Control Panel**.

2   Double-click **Add/Remove Programs**.

3   To uninstall the printer software, select **EPSON Printer Software** in the program list.

4   Click the **Add/Remove** button.

5   Select the **EPSON Stylus COLOR 440** icon in the EPSON Printer Utility Uninstall dialog box and click **OK**. Follow the instructions on the screen to uninstall your software.

6   To uninstall Status Monitor 2, select **EPSON Status Monitor 2** in the program list. **Background monitoring must be turned off before removing Status Monitor 2**.

7   Click the **Add/Remove** button. Follow the instructions on the screen to uninstall your software.

8   Restart your computer.

To reinstall your software, see the *Start Here* guide.

Windows 3.1x Instructions

1 Double-click the **Main** program group icon, then double-click the **Control Panel** icon.

2 Double-click **Printers**.

3 Select **EPSON Stylus COLOR 440** in the Installed Printers list and click the **Remove** button.

4 To reinstall your software, see the *Printer Basics* guide.

Where To Get Help

EPSON provides technical assistance through electronic support services and automated telephone services 24 hours a day. The following tables list the contact information:

Electronic support services

Service	Access
World Wide Web	From the Internet, you can reach EPSON's Home Page at **http://www.epson.com**.
EPSON Internet FTP Site	If you have Internet FTP capability, use your Web browser (or other software for FTP downloading) to log onto **ftp.epson.com** with the user name **anonymous** and your e-mail address as the password.
EPSON Forum on CompuServe®	Members of CompuServe can type **GO EPSON** at the menu prompt to reach the Epson America Forum. For a free introductory CompuServe membership, call (800) 848-8199 and ask for representative #529.

Automated telephone services

Service	Access
EPSON SoundAdvice^{SM}	For pre-recorded answers to commonly asked questions about EPSON products 24 hours a day, seven days a week, call **(800) 922-8911**.
EPSON FaxAdvice™	Access EPSON's technical information library by calling **(800) 922-8911**. You must provide a return fax number to use this service.
EPSON Referral Service	For the location of your nearest Authorized EPSON Reseller or Customer Care Center, call **(800) 922-8911**.

Note:
If you need help using other manufacturers' software with an EPSON product, see the documentation for that software for technical support.

To speak to a technical support representative, dial **(310) 974-1966** (U.S.) or **(905) 709-2567** (Canada), 6 AM to 8 PM, Pacific Time, Monday through Friday and 7 AM to 4 PM, Saturday. Toll or long distance charges may apply.

Before you call, please have the following information ready:

◗ Product name (EPSON Stylus COLOR 440)

◗ Product serial number (located on the back of the printer)

◗ Computer configuration

◗ Description of the problem

You can purchase ink cartridges, paper, and manuals from EPSON Accessories at **(800) 873-7766** or visit our web site at www.epsonsupplies.com (U.S. sales only). In Canada, please call **(800) 873-7766** for dealer referral.

Specifications

Printing

Printing method	EPSON's exclusive drop-on-demand Micro Piezo™ ink jet technology

Nozzle configuration

Black	64 nozzles
Color	21 nozzles $\times$ 3 (cyan, magenta, yellow)

Resolution	Maximum 720 dpi $\times$ 720 dpi
Print direction	Bidirectional with logic seeking
Control code	ESC/P Raster™, EPSON Remote
Input buffer	10KB
Character Tables	The character tables for PC437 (U.S., Standard Europe) and PC 850 (Multilingual) can be selected using the control panel buttons. Hold down the ♣ cleaning button and then press the ⏻ power button to turn on the printer. Then release both buttons.

Paper

Paper type	Size	Description	Thickness	Weight
Single sheets	Letter (8.5 × 11 inches) Legal (8.5 × 14 inches) Half letter (statement; 5.5 × 8.5 inches) Executive (7.5 × 10 inches) A4 (210 × 297 mm) A5 (148 × 210 mm) B5 (182 × 257 mm)	Plain bond paper and special ink jet papers distributed by EPSON	0.003 to 0.004 inch (0.08 to 0.11 mm) for plain bond paper	17 to 24 lb (64 to 90 g/m^2) for plain bond paper
Transparencies, Glossy film, Glossy paper	Letter (8.5 × 11 inches) A4 (210 × 297 mm) A6 (105 × 148 mm, glossy film only)	Transparencies, glossy paper, and glossy film distributed by EPSON	—	—
Self adhesive sheets	A4 (210 × 297 mm)	Self adhesive sheets distributed by EPSON	—	—
Envelopes	No. 10 9.5 × 4.1 inches (240 × 104 mm) DL 8.7 × 4.3 inches (220 × 110 mm) C6 4.4 × 6.4 inches (114 × 162 mm) Card 5.2 × 8.7 inches (132 × 220 mm)	Plain bond paper or air mail paper	0.006 to 0.02 inch (0.16 to 0.52 mm)	12 to 20 lb (45 to 75 g/m^2)

Paper type	Size	Description	Thickness	Weight
Ink jet cards	A6 (105 × 148 mm) 8 × 10 inches (203 × 254 mm)	Ink jet cards distributed by EPSON	—	—
Photo paper	Letter (8.5 × 11 inches) A4 (210 × 297 mm) 4 × 6 inches (102 × 152 mm) Panoramic (210 × 594 mm)	Photo paper distributed by EPSON	—	—
Photo stickers	A6 (105 × 148 mm), 16 frames per page	Photo stickers distributed by EPSON	—	—
Iron-On Cool Peel transfer paper	Letter (8.5 × 11 inches)	Transfer paper distributed by EPSON	—	—

Note:
Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, EPSON cannot attest to the quality of any non-EPSON brand or type of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

Poor quality paper may reduce print quality and cause paper jams and other problems. If you encounter problems, switch to a higher grade of paper.

Do not load curled or folded paper.

Special papers distributed by EPSON are only usable under these conditions:
Temperature: 59 to 77 °F (15 to 25 °C)
Humidity: 40 to 60% RH

Store EPSON Photo Quality Glossy Film and self adhesive sheets under the following conditions:
Temperature: 59 to 86 °F (15 to 30 °C)
Humidity: 20 to 60% RH

Printable area
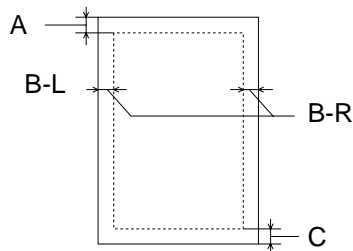
single sheets/index cards

envelope
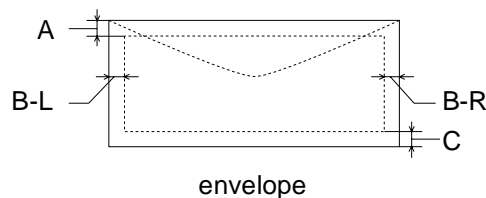
A: The minimum top margin is 0.12 inch (3.0 mm).
When loading multiple sheets of EPSON Photo Quality Glossy Film, the minimum top margin is 1.2 inches (30 mm).

B-L: The minimum left margin is 0.12 inch (3.0 mm).

B-R: The minimum right margin is as follows:
0.35 (9.0 mm) for letter and legal size sheets
0.12 inch (3.0 mm) for other size sheets

0.28 inch (7.0 mm) for DL envelopes.
1.10 inches (28.0 mm) for No. 10 envelopes.
0.12 inch (3.0 mm) for C6 envelopes.

C: The minimum bottom margin is 0.54 inch (14.0 mm).

Note:
Always load paper into the sheet feeder short edge first. However, envelopes should be loaded long edge first, with the flap side down.

You can extend the minimum bottom margin to 0.12 inch (3.0 mm) by selecting Maximum as the Printable Area Setting on the printer driver Paper menu. However, print quality may decline in the expanded area. Before printing large jobs, print a single sheet to confirm print quality.
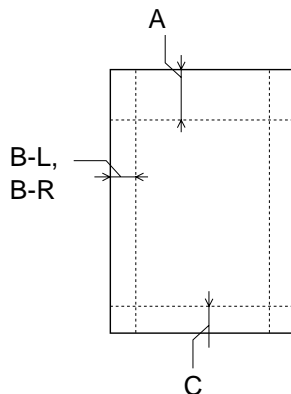
EPSON 4 × 6-inch Photo Paper
(dotted lines indicate perforations)

A: The maximum top margin is 0.67 inch (17.0 mm).

B-L,
B-R: The maximum left and right margin is 0.24 inch (6.1 mm).

C: The maximum bottom margin is 0.24 inch (6.1 mm).

Ink Cartridge

Specification	Black ink cartridge (S020187)	Color ink cartridge (S020191)
Color(s)	Black	Cyan, Magenta, Yellow
Print capacity*	540 pages text (ISO/IEC 10561 letter pattern) 380 pages graphics (5% coverage)	300 pages (15% coverage)
Cartridge life	2 years from production date (if unopened) and within 6 months after opening package, at 77 °F (25 °C)	

Storage temperature	Installed: −4 to 104 °F (−20 to 40 °C)
	     1 month at 104 °F (40 °C)
	 Uninstalled: −22 to 104 °F (−30 to 40 °C)
	     1 month at 104 °F (40 °C)	

Transit temperature	−22 to 140 °F (−30 to 60 °C) 1 month at 104 °F (40 °C) 120 hours at 140 °F (60 °C)	
Freezing temperature**	3.2 °F (−16 °C)	−0.4 °F (−18 °C)
Dimensions	0.7 (W) × 2.1 (D) × 1.5 (H) inches 19.8 (W) × 52.7 (D) × 38.5 (H) mm	1.7 (W) × 2.1 (D) × 1.5 (H) inches 42.9 (W) × 52.7 (D) × 38.5 (H) mm

*Print capacity may vary, depending on how often you clean the print head.

** Ink thaws and is usable after approximately 3 hours at 77 °F (25 °C).

Caution:
To ensure good results, use genuine EPSON cartridges and do not refill them. Other products may cause damage to your printer not covered by EPSON's warranty.

Mechanical

Paper feed method	Friction
Paper path	Sheet feeder, top entry, front out
Sheet feeder capacity	100 sheets at 17 lb (64 g/m^2) paper

Dimensions

Storage	Width: 16.9 inches (429 mm) Depth: 9.1 inches (231 mm) Height: 6.1 inches (157 mm)
Printing	Width: 16.9 inches (429 mm) Depth: 23.7 inches (602 mm) Height: 11.6 inches (295 mm)
Weight	11.5 lb (5.2 kg) without the ink cartridges

Electrical

Specification	120 V Model	220–240 V Model
Input voltage range	99 to 132 V	198 to 264 V
Rated frequency range	50 to 60 Hz	
Input frequency range	49.5 to 60.5 Hz	
Rated current	0.4 A (max. 0.5 A)	0.2 A (max. 0.3 A)
Power consumption	Approx. 15 W (ISO/IEC 10561 Letter Pattern) Approx. 5 W in standby mode ENERGY STAR compliant	

This product is also designed for IT power system phase-to-phase voltage 220–240 V.

Note:
Check the label on the back of your printer for the printer's voltage.

Environmental

Temperature

Operation	50 to 95 °F (10 to 35 °C)
Storage	−4 to 104 °F (−20 to 40 °C) 1 month at 104 °F (40 °C)
Transit*	−4 to 140 °F (−20 to 60 °C) 120 hours at 140 °F (60 °C)
	*Stored in shipping container

Humidity

Operation	20 to 80% RH, without condensation
Storage*	5 to 85% RH, without condensation
	*Stored in shipping container

Safety Approvals

Safety standards	UL 1950, CSA C22.2 No. 950 with D3
EMC	FCC part 15 subpart B class B, CSA C108.8 class B

Parallel Interface

Your printer is equipped with an 8-bit parallel interface, with the following characteristics:

Forward channel   Data format: 8-bit parallel, IEEE-1284 compatibility mode

Synchronization: $\overline{\text{STROBE}}$ pulse

Handshake timing: BUSY and $\overline{\text{ACKNLG}}$ signals

Signal level: TTL compatible

Connector: 57-30360 Amphenol connector or equivalent

Reverse channel   Transmission mode: IEEE-1284 Nibble mode

Adaptable connector: 57-30360 Amphenol connector or equivalent

Synchronization: Refer to the IEEE-1284 specification

Handshaking: Refer to the IEEE-1284 specification

Signal level: IEEE-1284 Level 1 device, TTL compatible

Data transmission timing: Refer to the IEEE-1284 specification

Glossary

banding   The horizontal lines that sometimes appear in a printed image. See also MicroWeave.

bidirectional   Printing in both directions, from left to right and from right to left.

buffer   The portion of the printer's memory used to store data before printing it.

CMYK   Cyan (blue-green), magenta, yellow, and black. These colored inks are used to create printed colors.

default   A value or setting that takes effect when the equipment is turned on, reset, or initialized.

Despooler   An EPSON software program for Windows 3.1x that displays the status of your print jobs and allows you to manage them.

dithering   A halftoning method in which dots are arranged in an orderly pattern. Dithering works best for printing images with solid colors, such as charts and graphs. See also halftoning.

dpi   Dots per inch. The dpi measures the resolution. See also resolution.

driver	A software program that sends instructions to a computer device to tell it what to do. For example, your printer driver accepts print data from your image processing application and sends instructions to the printer on how to print this data.
Error Diffusion	This halftoning setting smooths out edges by randomly placing dots of varying colors. This has the opposite effect of the Finest Detail setting.
Finest Detail	This setting automatically makes your printed images sharper and clearer. This has the opposite effect of the Error Diffusion setting. Be aware that this may increase the time required for printing.
font	A style of type designated by a name.
gamut	The range of colors that a device (such as a printer or monitor) can accurately reproduce.
grayscale	A scale of shades of gray from black to white. Grayscale is used to represent colors when printing with black ink only.
halftoning	A method of using dot patterns to represent an image. Halftoning makes it possible to produce varying shades of gray using only black dots, or a nearly infinite array of colors using only a few colors of dots.
host system	The computer connected directly to the printer in a network.

initialization	Process that returns the printer to its defaults (fixed set of conditions). This happens every time you turn on or reset the printer.
ink jet	A method of printing in which images, lines, letters, or symbols are formed by precisely spraying ink onto paper.
interface	The connection between the computer and a peripheral such as a printer. Your printer has a parallel interface, which transmits data one byte, or eight bits, at a time.
media	Materials upon which data is printed, such as envelopes, plain paper, special paper, and transparencies.
Micro Piezo	Ink jet technology that uses an electronic pulse to precisely force the ink through the print head. This results in smaller, cleaner dots, sharp lines, and crisp text.
MicroWeave	Printing technology that produces images in fine increments to reduce the possibility of banding. See also banding.
parallel interface	See interface.
print queue	Print jobs that are sent to the printer while it is busy are stored in a waiting line, or print queue, until they can be printed.
print server	The computer connected to the printer. It receives the jobs and then distributes them to the assigned printer. It also holds extra print jobs while the printer is busy. See also print queue.

printable area   The area of a page on which the printer can print. It is smaller than the physical size of the page due to margins.

printer driver   See [driver](#).

Progress Meter   An EPSON software program that shows the progress of the current print job. It appears each time you send a print job, unless you turn it off.

RAM   Random Access Memory. The area of your computer's memory that runs programs and stores data.

reset   To return a printer to its defaults either by sending a command or an INIT signal, or by turning the printer off and then back on.

resolution   The number of dots per inch used to represent an image.

ROM   Read Only Memory. Memory area in your printer or computer that cannot be modified. ROM retains its contents when you turn off the printer or computer.

saturation   The depth or vibrancy of a color; the amount of gray.

spool   The process by which the printer driver converts the print data into codes that your printer understands. This data is then sent to the printer directly or to the print server.

Spool Manager   An EPSON software program for Windows 3.1x that displays a list of EPSON Stylus printer queues and allows you to manage the queues and print jobs.

Status Monitor 2   An EPSON software program for Windows 95, 98, and NT 4.0 that displays the printer's status, such as paper out or the amount of ink remaining before printing.

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